Brown Bagging With Brass

Employees Discuss Issues Over Lunch With VPs

Over the past three months, about 200 Sandians have gotten together with a vice-president during lunch to talk about what's on their minds.

The mood is relaxed and informal as host VPs answer questions on important issues to Sandians, and employees air their views on events at the Labs. And lunch is free.

The luncheons are part of a new communications-enhancement program called Brown Bagging With Brass. Sponsored by Community Relations Div. 3163, the luncheons give randomly selected, nonsupervisory employees a chance to find out more about major decisions made at the Labs and what's in store for the future. Between 25 and 30 employees have attended each of the 10 luncheons held so far. VPs host the luncheons on a rotating basis.

Sandia, Livermore is in the planning stages for implementing a similar program, to be coordinated by Mike Robles (8520).

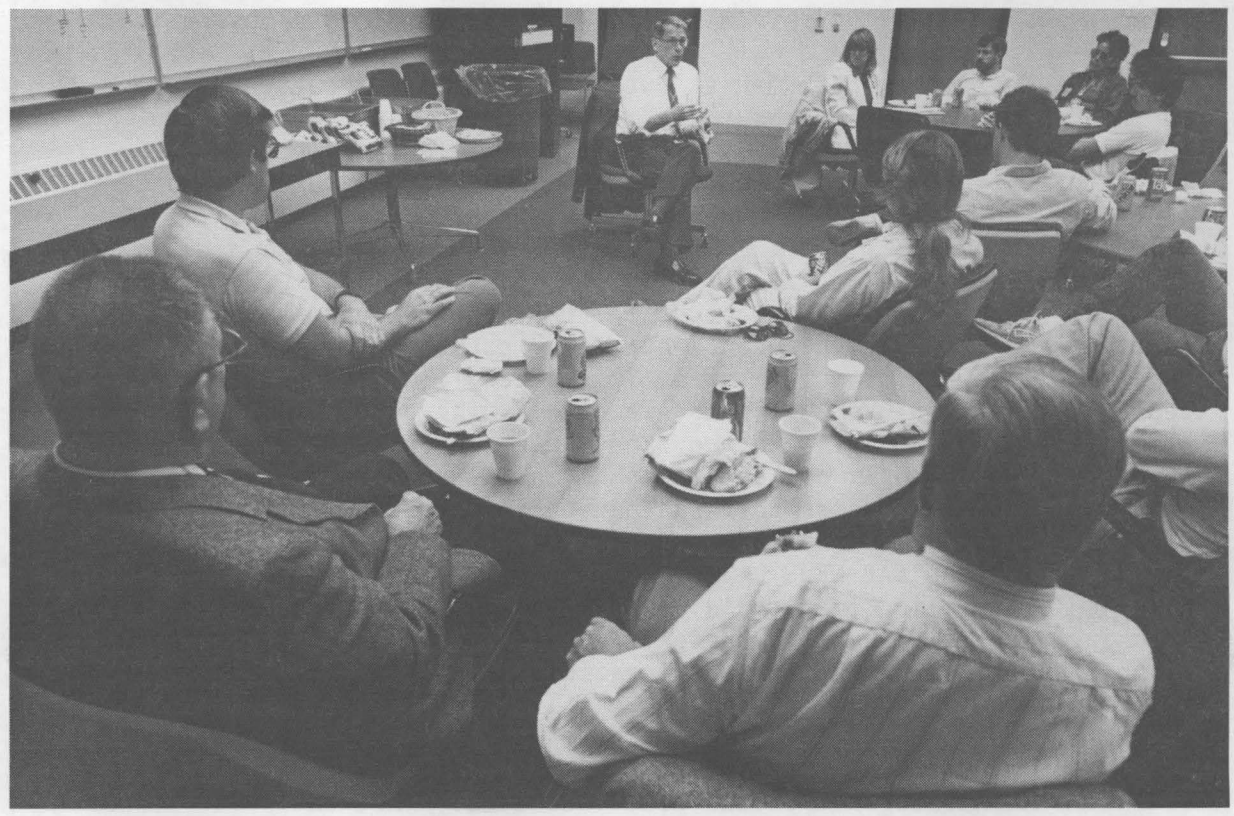
Launched in February

Brown Bagging With Brass — the brainchild of Community Relations Supervisor Rod Geer — was launched in February in response to results of last year's employee communication survey, which indicated Sandians wanted more explanation about what's going on at the Labs and long-range plans. Employees also wanted the opportunity to express feelings about the effect of Sandia's practices and policies on their jobs.

"I left the meeting feeling very upbeat and enthusiastic. . . ."

Some recurring issues and events discussed at luncheons so far: Vision Day (both before and after the April 26 event), strategic planning, bureaucracy, ES&H, and Sandia's future in view of events in eastern Europe. Employees have also asked questions about — and expressed concern about — pension plans, reclassification of technical staff members, communication between and within organizations, interpersonal skills of supervisors, and

(Continued on Page Four)



JOHN CRAWFORD (8000, center) talks with Sandia employees at a recent "Brown Bagging With Brass" session at Sandia, Albuquerque. Ten sessions have been held in Albuquerque so far, and more are planned. Sandia, Livermore is planning a similar program.

Better Job Matches

MLS Classification System Changes Now in Effect

More hiring flexibility. Additional opportunities to move into the Member of Laboratory Staff (MLS) ranks. Better job matches. These are some of the advantages resulting from recent changes in the MLS classification system, according to Carlos Griego, Supervisor of Job Evaluation and Classification Div. 3551.

Effective May 1, the new classification system for most MLSs includes six levels — 2 through 7 — instead of five. "Adding another MLS job classification level [Level 2] for inexperienced people with bachelor's degrees makes the MLS system somewhat similar to the one established last year for the technical staff," says Carlos. "It enables hiring people who have a bachelor's degree, but less than five years of post-bachelor's experience." (The technical staff classification system was revamped last fall; see LAB NEWS, Oct. 20, 1989.)

"When considering prospective job candidates, line organizations can more closely match people's talents and interests with job requirements," Carlos notes.

Moving From Other Classifications

The new system provides, for the first time, a way for employees to move from other classifications to the MLS ranks using the post-and-bid route. In fact, on-roll employees now can follow one of several paths toward becoming MLSs (see "Three Ways to Move," page four).

Another change involves reclassification decisions. Previously, the Laboratory Classification Review Committee met annually to review employees for reclassification to MLS. Now, beginning July 1, reclassification decisions will be made by the line vice-presidents. From time to time, a newly formed group — the Laboratory Classification Policy Committee — will review reclassifications to ensure consistency and fairness within MLS ranks across the Labs.

A special category within the MLS classification system has been established for people who have experience or educational background in Management Information Systems (MIS) — some

(Continued on Page Four)

LAB NEWS

VOL. 42, NO. 11 SANDIA NATIONAL LABORATORIES June 1, 1990

Sandian Invents, Patents Toy Flying Saucer

A toy flying saucer invented by a Sandia technician is being marketed by a model airplane manufacturer and sold by some major retailers.

UP, UP, AND AWAY! — Al Smiel (2361) launches toy flying saucer that is being marketed by major retailers. (Photo by Mark Poulsen, 3162)

The business venture culminates a 15-year, part-time avocation of Al Smiel (2361), who designed and tested 27 rotating, free-flying saucers propelled by model airplane engines before he was able to come up with one that didn't break when it hit the ground.

"I thought surely, with an airplane engine, you could design a flying saucer. The trick was getting it to free-fall without damage upon impact. I had to overcome some technical obstacles to achieve that," he says.

Although the experimental models he fashioned by hand from balsa wood flew 1500 feet into the air before coming down, the commercial models have a more limited altitude. This will alleviate the toymaker's concern that youngsters might lose the gasoline-powered vehicles if they fly too far out of sight, says Al. Built by Cox Hobbies Inc. of Corona, Calif., the toy aircraft are being marketed under the name "Flying Saucer Space Probe" and are made of Styrofoam rather than wood.

Although he hasn't yet seen the models for sale in Albuquerque, Al says they should be hitting the shelves soon at Toys-R-Us outlets around the country, and Sears will be marketing the toy aircraft for Christmas. In fact, he says, his supplier has notified him that some of the vehicles are even being shipped overseas. •LD

This & That

National News – You had to be holed up tightly in late May to miss mention of Sandia's name in the national press. The Labs was asked last year to conduct detailed studies to help determine possible causes of the tragic April 19, 1989, explosion aboard the battleship *USS Iowa*, which killed 47 sailors when a 16-inch gun turret blew up during practice firing. Some 30 Sandians worked directly on the project. Roger Hagengruber (9000) and Dick Schwoebel (2500) led the Sandia effort, with Dick testifying before the Senate Armed Services Committee on May 25. As a result of the Sandia work and follow-up tests by the Navy, the investigation into the explosion has been reopened, and the Navy has suspended the firing of its 16-inch guns. We hope to publish more details about Sandia's tests – what we did and how – in a future issue.

* * *

Hot News – We often "sweat out" deadlines here, but especially so on this issue. We were without air conditioning. Contractors began installing a new unit in our building several weeks ago, and were supposed to finish this week. With the outside temperature around 90 last week and some inside temperatures near 85, I think several of us here learned some new words from one another. I hope we didn't print any.

* * *

Slow News – Retirees who get the LAB NEWS through the mail sometimes call to say they don't get their paper for several days – in some cases, a week or more – after it's dated. I wish I had a better reply, but there's just not a lot we can do. The paper is mailed right after it's printed, but with the Labs' bulk-rate permit. Unfortunately, that's what's commonly called the "junk-mail" rate, so we have the same mailing priority as those letters that begin something like: "Congratulations. You may have won. . ."

Mailing the LAB NEWS at the first-class rate to the 4000-plus folks on the mailing list would be prohibitively expensive; we're checking out the possibility of getting a second-class mailing permit, which many commercial newspapers/magazines use. If we're successful, that could speed up delivery significantly.

* * *

Many Pints of the Good Stuff – Excerpts from a recent letter to President Al Narath from United Blood Services: "The continuing support from all the people of Sandia Labs who care enough to give a part of themselves that others might live is a very special gift. The units donated at your blood drives are very important in helping us meet our patients' needs [in 41 area hospitals]. Since January [through April] we have received 391 pints of blood from Sandia employees. Linda Stefoin [3543], your blood drive coordinator, is a joy to work with, and your donors are a very special group of people."

Sandians and their family members, contractors, DOE employees, and others on Kirtland AFB can donate blood at Sandia every Tuesday. The times and places are announced in the *Weekly Bulletin*. Call Linda on 844-7433 for more information.

* * *

Wanted: Preserved Manager – An ad for a Liverpool, England, firm printed in the employment section of a recent issue of *New Scientist* sought a "Freeze Dried Pharmaceuticals Manager." •LP

LAB NEWS

Published Fortnightly on Fridays

SANDIA NATIONAL LABORATORIES

An Equal Opportunity Employer

ALBUQUERQUE, NEW MEXICO 87185-5800
LIVERMORE, CALIFORNIA 94550
TONOPAH, NEVADA
NEVADA TEST SITE
AMARILLO, TEXAS

Sandia National Laboratories, a prime contractor to the US Department of Energy, is operated by Sandia Corporation, a subsidiary of American Telephone and Telegraph Co.

LARRY PERRINE, Editor (505/844-1053)
PHYLLIS WILSON, Assistant Editor (844-7842)
CHARLES SHIRLEY, Writer (846-5542)
LINDA DORAN, Writer (846-6888)
RANDY MONTOYA, Photographer (844-5605)
MARK POULSEN, Photographer (844-5605)
JANET WALEROW, Editorial Assistant (844-7841)
TABITHA JEANTETTE, Assistant
BARRY SCHRADER, Livermore Reporter
(415/294-2447; FTS 234-2447)

Take Note

Sandia is presenting a summer-school computer education course, "Information System Design," at Albuquerque Academy. John Sharp (2825) is the instructor of this new information system design technique, an introductory computer course that has previously been taught to high-school students only in Australia. The class shows how to develop information systems that start out as very simple and become as complex as necessary. Using simple English sentences, students will develop increasingly complex data bases. Course dates are June 11-29, 9 a.m.-12 noon. Because Sandia is providing the instructor, computers, and course materials, the normal tuition is being replaced by a $25 administration fee. The course is open to all high-school students in Albuquerque, but certain restrictions apply. Call 828-3399 for an application form and more information.

* * *

The 4th International SAMPE (Society for the Advancement of Material and Process Engineering) Conference will be held June 12-14 at the Albuquerque Hilton Hotel. Al Narath is the keynote speaker on June 12 at 8:15 a.m. The program includes a panel on the effect of environmental issues on the electronics industry, "Environmental Issues/An Uncertain Future."

Sandians on the conference committee include Robert Martinez (7234), general chairman; Ken Wischmann (DMTS), program co-chairman; Howard Arris, registration chairman; and David Zamora (all 7472), hospitality and press liaison. On-site registration can be done from 6:30 to 8 p.m. June 11, 7:30 a.m. to 5 p.m. June 12 and 13, and 8 a.m. to 1:30 p.m. June 14. For information, contact Robert on 6-0449.

Dept. 2130 Leads Fund-Raising Efforts For Ron Light Family

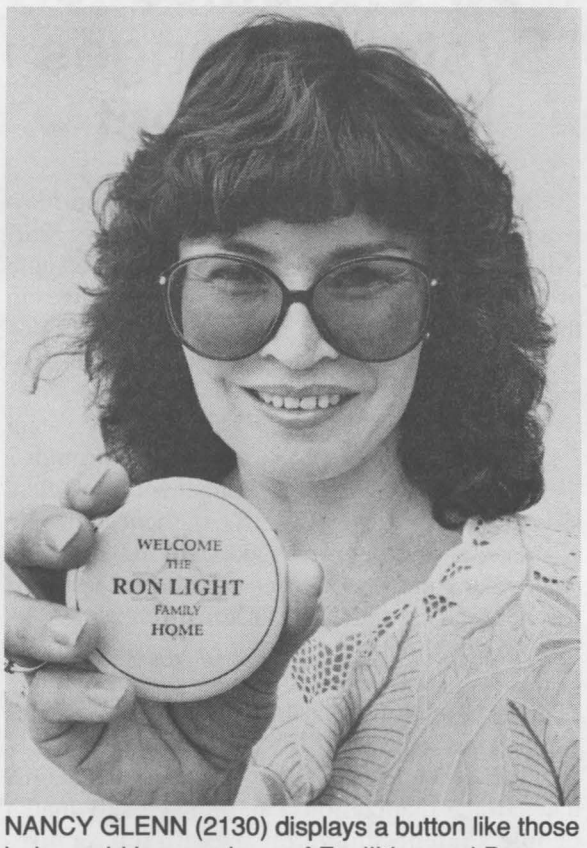
Sandian Ron Light and his family will return to Albuquerque sometime this summer from Dallas, where Ron has been undergoing rehabilitation for severe head injuries he received when he and his family were run down by a motorist May 1, 1989.

Ron's colleagues in Facilities and Process Development Dept. 2130 are spearheading fund-raising efforts to buy a van with a wheelchair lift that will be presented to Ron and his family upon their return. So far, about a third of the $35,000 needed to purchase the van has been collected, according to Don Davis (2131).

Sandians who'd like to contribute to the van fund may do so at any First Interstate Bank branch. Contributions are also being accepted at the Sandia Laboratory Federal Credit Union. Checks may be made payable to the Ron Light Van Fund.

Members of Dept. 2130 are also selling buttons that say "Welcome the Ron Light family home" ($5 each, or more if you choose); contact Don on 846-9838, Doug Weaver on 844-7736, or Nancy Glenn on 845-8048 for information about how to buy one.

A benefit sale tomorrow (June 2) from 9 a.m. to 3 p.m. at 1104 Oro Real NE (between Lomas and Copper east of Tramway) includes household items, baked goods, and some of Ron's art (serigraphs). •



NANCY GLENN (2130) displays a button like those being sold by members of Facilities and Process Development Dept. 2130. The buttons cost $5 (higher donations cheerfully accepted!); proceeds go to the Ron Light Van Fund.

Sympathy

To Dale Hill (5132) on the death of his mother-in-law in Albuquerque, May 14.

To Jennie Otero (3726) on the death of her sister in Peralta, May 17.

To Al Bustamante (9142) on the death of his daughter in Albuquerque, May 20.

From Federal Lab Consortium

Witze and Porter Win Tech-Transfer Award for Engine Probe

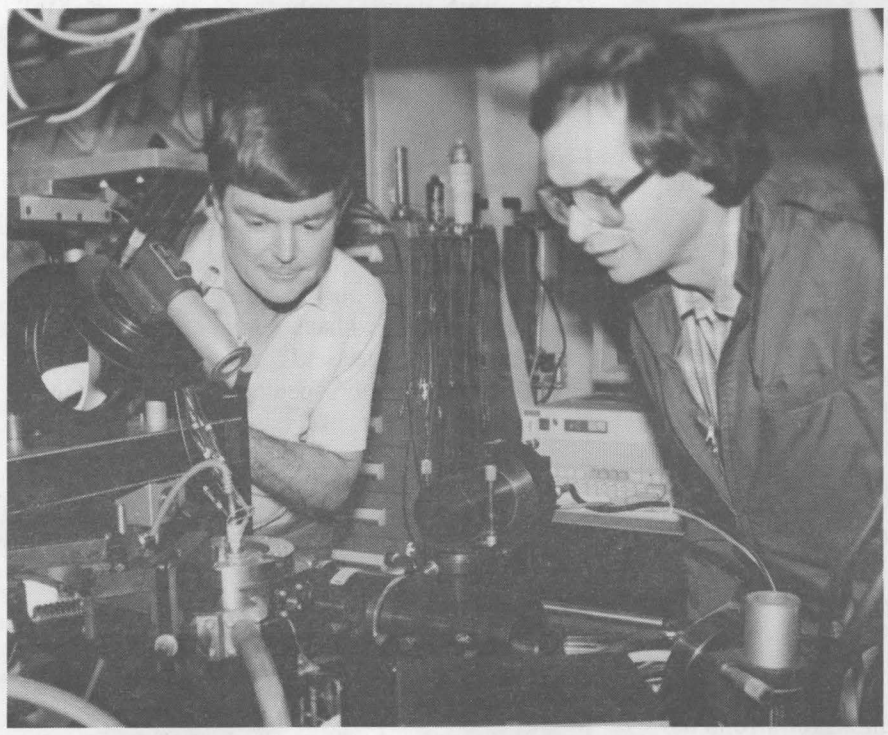
Two Livermore Sandians have been awarded a Federal Laboratory Consortium Award for Excellence for their contributions to the transfer of new commercial products and processes.

Pete Witze (DMTS) and Eldon Porter (both 8362) were among 53 people — including an Albuquerque Sandian as well (page seven) — from 23 different R&D facilities nationwide who received the 1990 awards at the FLC annual spring meeting.

Pete and Eldon were recognized for initiating a partnership with an instrument manufacturer and industry users that led to the rapid commercialization of fiber-optic-instrumented spark-plug technology. Their invention is a spark-plug probe for seeing inside automobile engines while they're running. This new tool — which helps automotive researchers understand and improve idle quality — was adopted by Barrack Laboratories of Marlborough, Mass., which is marketing it as the Barrack Witze Probe™.

"The probe had gained industry acceptance even before it reached the market."

"Idle roughness is an industry-wide concern in today's automobile engines," says Bill McLean, Manager of Combustion Technology Dept. 8360. "It is believed that the early flame-development period — the first few milliseconds after ignition — is critical. This probe provides the first-of-its-kind capability to investigate this phase of the combustion process. The real-time data acquisition system permits direct measurement of the flame kernel development while engine operating parameters are varied."



PETE WITZE (DMTS, left) and Eldon Porter (both 8362) look over their fiber-optic spark plug experiment in the Combustion Research Facility lab.

Because the probe was built with a standard spark plug, it can be installed in any engine without modification, Bill explains. And because of the simplicity of the complete system, it is equally easy to use on an engine test stand or under the hood in a garage.

Pete notes that he and Eldon worked with potential industry users, providing them drawings and technical data, and incorporating their ideas during the R&D process. "For example," he says, "we helped the General Motors Research Laboratory build its own system prior to market availability. Chrysler is currently using a prototype system on loan from Sandia. The Ford Scientific Research Laboratory bought the first unit sold by Barrack." Sandia is also continuing to develop analysis software for use by all three, Pete adds.

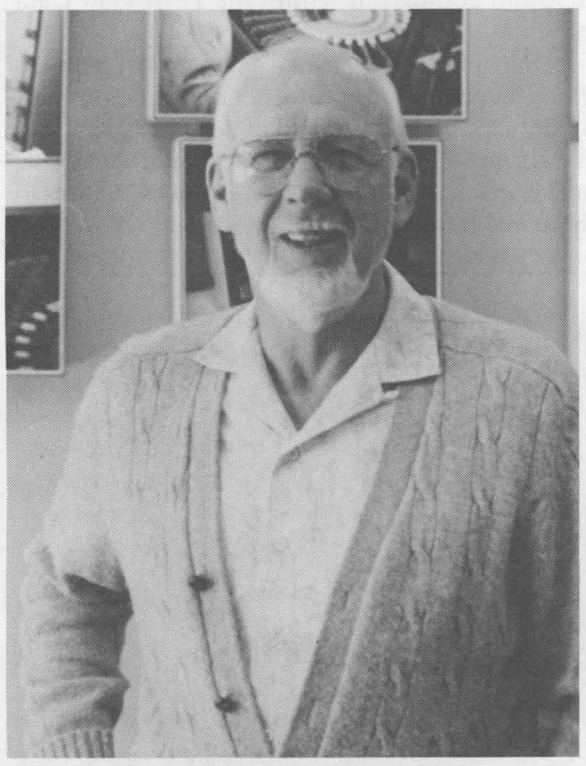
Sandia's Livermore Technology Transfer Officer, Mike Dyer (8300A), says that rapid technology transfer was successful because Pete and Eldon were able to exploit the concept of "simultaneous engineering" — in other words, involving all essential parties during the entire process. Says Mike, "Sandians served as the facilitating link between the diverse organizations involved: the laboratory developers, the instrument manufacturer, and the user industry. We found that the probe had gained industry acceptance even before it reached the market."

The FLC awards for excellence were established in 1984 to recognize people in federal labs who do outstanding work in transferring technology. The FLC is composed of more than 500 laboratories and research centers from 14 federal agencies. It was founded in 1974 to assist the US public and private sectors in using technology developed through the efforts of the government. •BLS

Congratulations

To Barbara Moy (8133) and Dick Demo (8445), married in Livermore, May 12.

To Sherry Bowen (8274) and Olaf Ingwerson, married in Los Angeles, May 19.



RECENT LIVERMORE RETIREE Chuck Pignolet (DMTS, 8432) had 31 years of service.

Earnings Factors March 1990

Savings Plan for Salaried Employees (SPSE)	Earnings Factors
AT&T Shares	1.0647
Government Obligations	1.0042
Equity Portfolio	1.0228
Guaranteed Interest Fund	1.0074
South Africa Restricted Fund	1.0342
Savings and Security Plan — Non-Salaried Employees (SSP)	
AT&T Shares	1.0652
Guaranteed Interest Fund	1.0073
South Africa Restricted Fund	1.0339
Equity Portfolio	1.0070

SANDIA LIVERMORE NEWS

CHINESE CHRISTIAN SCHOOL of San Leandro sent its Drum & Bell Corps, Drill Team, and Flag Line to help celebrate National Asian Pacific American Week at Sandia. The units performed in the east parking lot May 7. Other events included lunchtime films, a talk on acupuncture, and an arts and crafts festival at LLNL.

(Continued from Page One)

MLS Changes

25 percent of the MLS population. These individuals are assigned to a distinct career path, defined by Sandia's MIS Rotation Committee. MIS work includes design, development, implementation, and maintenance of automated data processing systems. MLS (MIS) levels range from 3 (entry level) to 7.

The new MLS guidelines will also impact on-roll MLSs now at Level 4, because requirements for advancing to Level 5 have been modified. Before, two consecutive "Consistently Exceeds Job Requirements" (CE) performance ratings were required, along with a salary level at least 105 percent of Level 4 midpoint (middle of the salary range). The new system deletes the CE rating requirement and changes the salary-level requirement to 103 percent of Level 4 midpoint. Candidates for Level 5 jobs must also have a minimum of two years in Level 4.

More Lateral Moves?

"The changes in advancement requirements — especially deleting the one for two CEs — should mean that we'll see more lateral moves in the Level 4 ranks," notes Carlos. "Before, people at Level 4 were reluctant to move laterally, because they thought they'd have a better chance at keeping — or getting — CE ratings by staying put in jobs where they had more experience."

"Advancement is . . . dependent upon a need within the organization for work at a higher level. . . ."

Advancement requirements for all levels in the new MLS — and MLS (MIS) — classification system are detailed in revised guidelines that were recently distributed to all supervisors and MLSs. All affected employees and management are encouraged to read these guidelines.

When MLSs move from one level to a higher one, they receive a one-time, lump-sum payment — approximately 5 percent of the midpoint salary of the level to which they're advancing. These one-time advancement awards are separate from merit-review increases and individual performance awards that may be given as part of the annual performance review.

"Employees should recognize that they're not automatically *entitled* to advance to higher levels or classifications," Carlos cautions. "Advancement is, for the most part, dependent upon a need within the organization for work at a higher level, as well as the employee demonstrating the ability to work successfully at that level. And, of course, a job must be verified at a given level by my division and authorized within the Personnel Data System."

Summing up, Carlos says the new MLS guidelines' main impacts are "better matching people's talents to the broad range of activities and jobs available on the administrative side of the house, and opening up new ways for on-roll employees to become MLSs." •PW

Three Ways to Move Into MLS Ranks

With new Member of Laboratory Staff (MLS) guidelines in place, on-roll employees can now follow three different paths to MLS status: post and bid, successful completion of the MLS Trainee Program, and reclassification by the appropriate vice-president.

Only entry-level MLS jobs will be available to on-roll employees through post and bid. MA IVs, MA Vs, TAs, STAs, or Section Supervisors may bid on entry-level openings, provided they have a bachelor's or master's degree in an appropriate field (one required by the organization with the opening). The other requirement is two years of relevant Sandia experience — related experience that demonstrates the ability to perform at the MLS level. MLS candidates selected will become Level 2s, while MLS Management Information System candidates selected will become Level 3s.

Through the MLS Trainee Program, employees with bachelor's degrees can attain MLS status through on-the-job professional-level assignments and graduate-level education. Any employee with a bachelor's degree or higher may bid on an MLS Trainee posting; candidates must also have received above-average performance ratings during their most recent performance reviews. Upon successful completion of the program, trainees are reclassified to MLS Level 4s.

Requirements for reclassification include the existence of an authorized job at the MLS level, previous above-average performance, demonstrated ability to perform at the MLS level, and line supervisor recommendation. Final approval for reclassification is the organization VP. Eligibility for reclassification depends on educational background and/or experience under one of three options:

- a master's degree and two or more years of post-master's Sandia experience and at least two different professional-level job assignments;
- a bachelor's degree and five to seven years of post-bachelor's Sandia experience, including experience as an MA IV, MA V, TA, STA, or Section Supervisor and three years of professional-level experience in at least two job assignments; or
- no college degree, but 10 years of Sandia experience (experience details same as those noted above for bachelor's degree candidates).

(Continued from Page One)

Brown Bagging With Brass

matrix management.

Several employees have said that, while initially they were reluctant to attend the luncheons, they were glad they went. "I left the meeting feeling very upbeat and enthusiastic about our future and the changes taking place in our culture," says one attendee.

Gay Nell Harris (5120) says the luncheons provide a comfortable atmosphere for raising concerns. "People seemed willing to participate and ask questions," she says. "I think it's a very positive thing to be able to meet people and find out where we're going."

Everet Beckner (5000), who hosted the first luncheon on February 22, said as he was leaving, "That worked. We ought to keep doing it." That's the plan. Several luncheons will be held every month. Randomly selected employees are mailed invitations a couple of weeks ahead of time.

•JClausen (3161)

Potpourri of Topics

Sandia's future and empowerment have been popular topics at Brown Bagging With Brass luncheons.

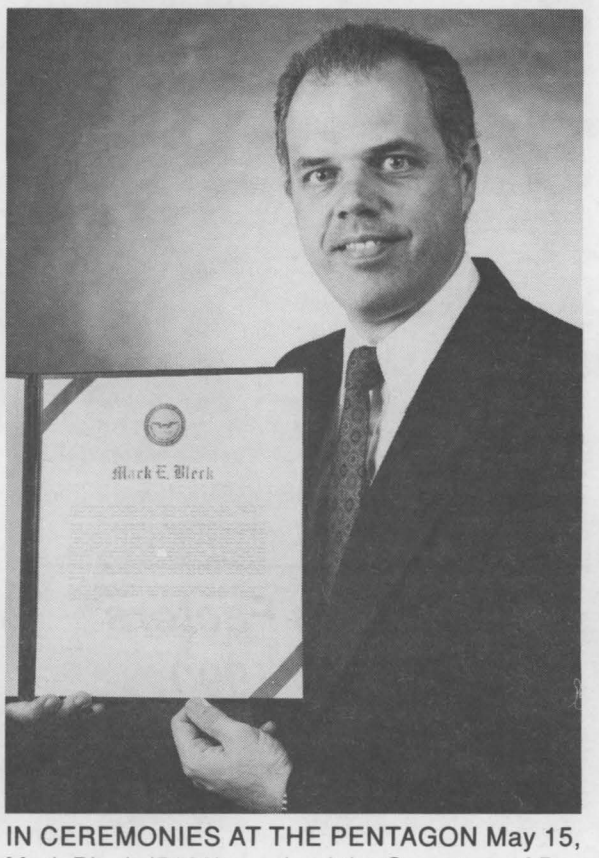
Employees have expressed confusion over what empowerment means to them. Luncheon hosts have given examples of how empowerment might come into play, but have cautioned employees that it doesn't mean anybody can do whatever he or she wants. It also won't come about overnight, they've consistently said.

"Nobody's sitting down and writing a whole new set of rules this weekend — it'll happen over time," said Dan Hartley (6000) at a May luncheon.

Responding to questions about Sandia's future in the wake of declining defense spending, vice-presidents have told Sandians that there will be an ongoing need for weapon research. However, the emphasis will be on safety and reliability and on maintaining the stockpile, rather than on building bigger and faster weapons.

Asked about possible organization structure changes, Dan joked that the rumor about doing away with VPs wasn't true. "That seems to get a lot of votes," he said.

Vice-presidents have given employees advice on how to solve problems with their supervisors and how they can resolve concerns anonymously.



IN CEREMONIES AT THE PENTAGON May 15, Mark Bleck (5128) received the Secretary of Defense Medal for Outstanding Public Service. Mark was cited by Secretary of Defense Dick Cheney for his efforts in assessing the performance of the Nuclear Command and Control System communications connectivity, articulating his findings, and staffing recommendations through top-level Department of Defense and other governmental agencies. Mark returned to Sandia last week after a two-year assignment at DoD Headquarters as Scientific Advisor to the Plans Division, US Nuclear Command and Control System Support Staff.

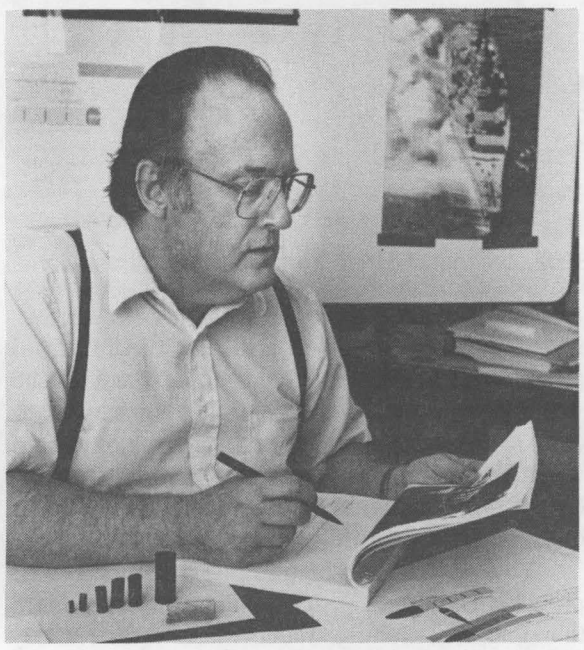
'More Flexibility and Freedom'

Trading Management Responsibilities for Other Challenges

Two members of the Research 1000 vice-presidency — Mark Davis and Walt Herrmann — with a combined 48 years in the management ranks have requested and received the opportunity to leave their management responsibilities behind and head off in different directions.

Mark describes his new job as a combination of matchmaker, idea man, talent broker, and more. Until recently Manager of Metallurgy Dept. 1830, he has become a department of one, with a new title: Manager, Research Engineer for Metallic Materials Dept. 1880.

Mark joined Sandia in 1963, shortly after he received his MS in metallurgical engineering from the University of California at Berkeley. He was



MARK DAVIS, Research Engineer for Metallic Materials 1880, has been working on the *USS Iowa* investigation for six months. Here, he's making some notes on gun-powder-propellant grains (lined up on table) of the type used on the *Iowa*.

promoted to supervisor of the Metallurgy Division in 1968 and became Manager of the Metallurgy Department a year later.

"The DM [department manager] job was fantastic," says Mark, "in that it gave me the opportunity to be aware of, and get involved in, a tremendous variety of Labs programs. And, during my 20-plus years in that job, I learned a lot about existing capabilities we have in materials research — capabilities that can definitely contribute to almost every Labs program, from weapons to energy to foreign-technology assessment.

"We all look for ways to make a maximum contribution, and I got to thinking, 'Hey, maybe there's a way I can use my broad knowledge of available Sandia talent to greater advantage.' That's when I approached Venky [Narayanamurti, Research VP 1000] with the idea of establishing the Research Engineer job — with me in mind as the first applicant, of course!"

Last year, three department managers left the management ranks in Org. 1000 to become Sandia's first Research Scientists (LAB NEWS, Jan. 27, 1989). At the time, Venky pointed out that the moves — though untraditional at Sandia — were "an important way to nurture Sandia's technical excellence" and "promote the health of our tech base."

"I see my new job as somewhat analogous to those of the Research Scientists," says Mark, "but there *are* some basic differences. For instance, the Research Scientists' time is charged to direct research budget cases; their charter is to do science of potential long-range importance to Sandia programs. In contrast, my time in the Research Engineer job will be funded by the customers I serve, and the work I do — in all cases — will relate directly to current Labs programs."

As Research Engineer for Metallic Materials, Mark will work to ensure that Sandia organizations developing new programs take maximum advantage of the materials expertise in Org. 1000. "Materials technology is the common denominator in every Labs program," Mark notes, "so I'll be working for a variety of customers, learning about as many new programs as I can, and attempting to tap any and all available technological expertise that's needed for particular projects.

"In our 'new' Sandia world, the last thing you want is rigidity."

"That shouldn't be too difficult. Over the years, I've come to know the 'cunning' folks around here — the people who can most likely simplify projects for other organizations."

For the last six months, Mark has been working on the *USS Iowa* explosion investigation. In future programs, he will be assisting the Waste Isolation Pilot Plant project (looking at the benefits of preprocessing waste to ensure its ultimate predictable containment) and the magnetic fusion program (investigating high-heat-flux components for use in high-energy physics experiments such as the Supercollider).

"The new job will give me the flexibility to pursue a few projects that I find really interesting — to devote full time to technical issues, rather than being distracted with a multitude of management responsibilities," says Mark.

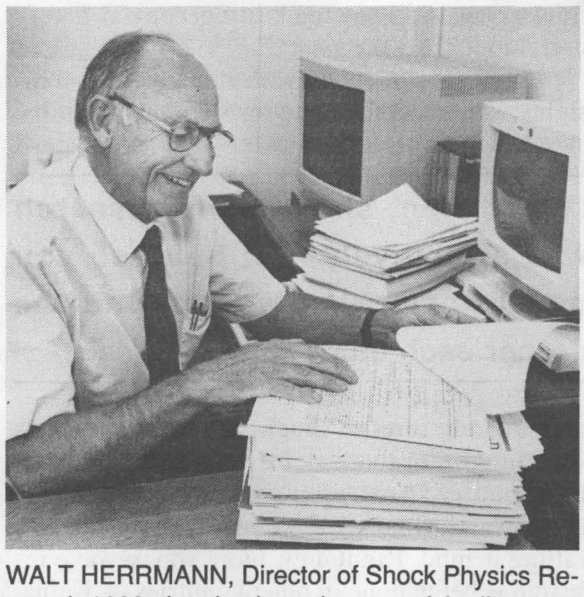
"It seems to me," he continues, "that opportunities like this — managers being able, if they wish, to move into jobs such as Research Engineer or Research Scientist — lend much more flexibility to Sandia's management structure. You're not locked into a rigid system.

"In our 'new' Sandia world, with changing project-management methods and an emphasis on continuously improving quality, the last thing you want is rigidity. Rather, we need more flexibility and freedom to attack and solve problems. People need to use their strengths in creative ways, and I feel I now have that opportunity.

"My new job is an experiment; I hope it will show we need others in similar positions. I intend to do my best to make that happen."

Walt Herrmann: Soon-to-Be Author

Walt Herrmann, Director of Engineering Sciences 1500 since 1982, is now able to pursue a long-time dream: writing a text that explores the history of shock-wave physics research and the tremendous strides made in this field as computer-modeling techniques were introduced.



WALT HERRMANN, Director of Shock Physics Research 1600, thumbs through some of the literature about shock-wave research he's collected over the years. References to this information — and stacks more — will be included in a bibliography that will be part of the book Walt's writing.

'Outstanding Accomplishments'

Venky Narayanamurti (VP 1000) comments on the moves of Mark Davis and Walt Herrmann to nonmanagerial positions: "Outstanding technical and management accomplishments are an integral part of both Walt's and Mark's Sandia careers. I am pleased to be able to fulfill their desire to return to full-time technical work. Continued movement between the management and technical ranks is one important way of accommodating the changing needs of the organization and its people."

After seven years at MIT's Division of Sponsored Research, Walt joined Sandia in 1964 as Supervisor of the Deformation Structures Division. "Much of my work at MIT during the '50s involved developing computer-simulation techniques that could be used for shock-wave problems," says Walt. "So when I came to Sandia, I was asked to begin a computer-simulation program that would complement the Labs' experimental shock-wave work.

"Back then, shock-wave research was a relatively new field — it really just got started during World War II — so you never knew what was around the corner each day. It was tremendously interesting — and exciting."

Before he joined MIT, Walt taught fluid mechanics at Cape Town University (South Africa) after he received his PhD in mechanical engineering from the University of Witwatersrand in Johannesburg.

Since the '60s, Sandia's shock-wave physics program has made significant advances, largely due to more and more sophisticated experimental and modeling techniques, Walt notes. "You can operate much more efficiently and productively," he says, "if you don't have to rely exclusively on 'cut-and-try' engineering — bomb drops, for example — to find out how systems will behave when subjected to impacts or explosions. Combining experiments with the ability to simulate field-test conditions on a computer and to predict the effects on materials saves not only time, but money."

Sandia is recognized as a world leader in shock-wave research, Walt says, because the Labs' shock-wave program combines — under one roof — outstanding theoretical research and experimental techniques, as well as a sophisticated computer-simulation capability developed over the past 26 years. "It's that combination that really gives us an efficiency edge," says Walt. "In most other laboratories working on shock-wave phenomena, at least one of those elements — often the computing capability — is isolated from the group doing shock-wave work."

In the early days, Walt says, because shock-wave research was applied mainly to defense programs, much of the work was done in federal laboratories, and not much was openly published. Even now, experimental facilities and computing are so expensive that very few universities provide courses or research opportunities in the field.

For some time, Walt has believed there's no good text available that details the advances in shock-wave research — of Sandia and other organizations. "Because they haven't had access to up-to-date information," Walt says, "new scientists in the field are repeating work done 20 years ago. So when they get out on a job, at Sandia or elsewhere, they have to be brought up to speed.

"I've thought for some time that I'd like to put all the information that's been accumulated over the years into a book that would summarize, for

(Continued on Page Six)

Volunteers In Action: Kylene & Perry Molley

Wife/Husband Tutoring Team Likes Helping Eldorado Students

This is the second in a series of articles about Sandians who volunteer their time and talent to help others. Al Stotts (3163), coordinator of the Volunteers in Action (VIA) program is the author. Nearly 1100 Sandians are VIA members.

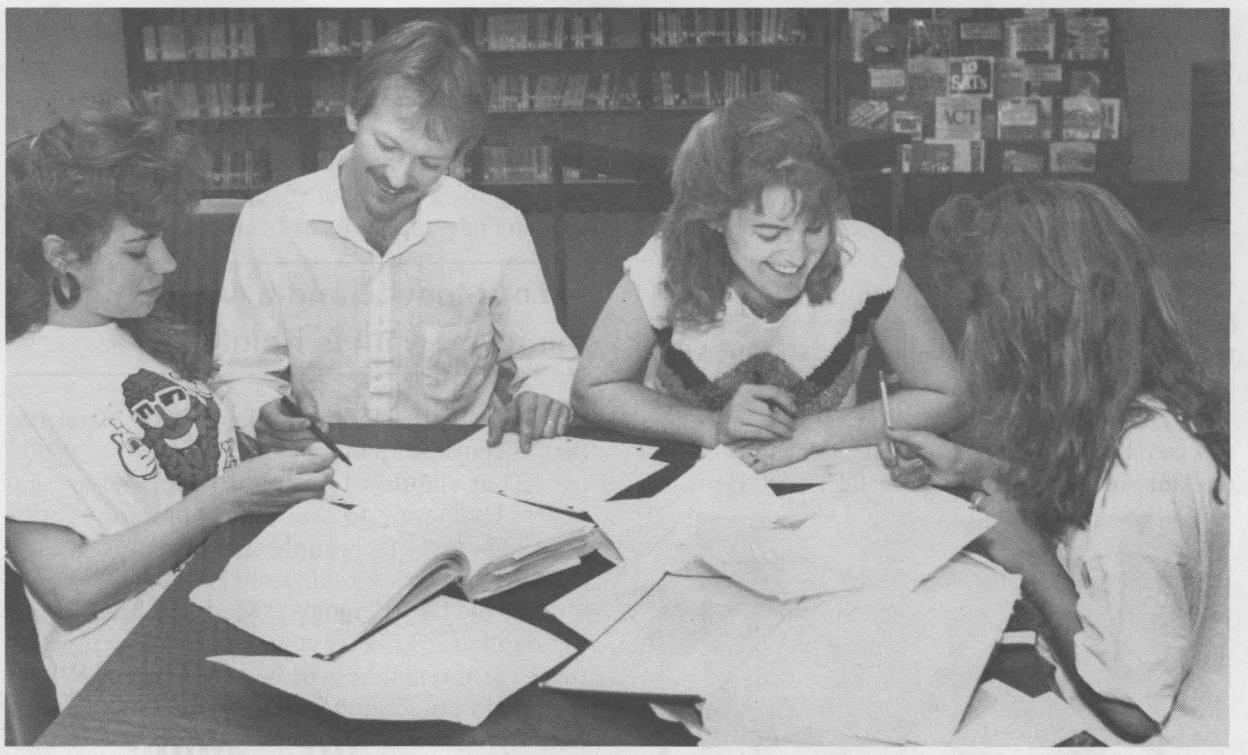
Marriage enrichment counselors probably have never considered the potential of husbands and wives becoming closer through volunteer tutoring of high-school students who need help with math and science.

But Kylene (3202) and Perry (1415) Molley say that tutoring students every Wednesday night at Eldorado High School has been an enjoyable and rewarding experience — for them individually, and for their marriage.

"We were looking for something we could volunteer for together," Kylene says. "We saw a Volunteers In Action announcement in the LAB NEWS about Eldorado needing tutors, and that appealed to us. It's good for both of us. We have different tutoring styles, so we don't actually tutor as a team. The part of it that makes us feel closer to each other is that we both get the same good feelings out of helping these kids. This is fun."

Perry is an electrical engineer and Kylene is a chemical engineer.

"As engineers, we realize that there is a need to get young people interested in science and math and engineering," Kylene says. "It's a lot better to help rather than brood about the decline of science education in the nation."



VOLUNTEER TUTORS Perry (1415) and Kylene Molley (3202, second and third from left) work with students at Eldorado High.

Program Begins With Sandians

The Eldorado tutorial program began in January, largely with Sandia volunteers recruited through the Volunteers In Action program administered by Community Relations Div. 3163. Eldorado Assistant Principal Marlene Blake contacted Community Relations in December of last year with a request for volunteers. She says the Sandians who responded have been the lifeblood of the program.

"Sandia deserves credit for being instrumental in starting this tutoring program," Blake says. "We've been trying to establish a program for quite some time. We really didn't know how to get the word out to the community to get volunteers. I heard about Volunteers In Action, so I called, and we had a wonderful response from Sandia volunteers. We'd like to expand this program with more volunteers from Sandia and other companies. The students who use the program believe they are getting very good help, and their grades are improving."

Typically, Kylene, Perry, and the other tutors work with two to four students at a time, and they see students with a wide range of needs.

"Recently, Perry has been teaching algebra and math, and I've been doing geometry tutoring," Kylene says. "We've always liked math and science, so it's nice to help someone appreciate those subjects, rather than hate them. When students first come in, they're confused. By the end of a session, they feel better because they can do the work themselves. I helped four girls who were preparing for a chemistry test. They were just terrified of failing the test. By the end of the evening, they were confident and actually thought chemistry was fun."

More Tutors Needed

Kylene has some pointers for anyone interested in becoming a tutor at Eldorado or any of the other high schools in town that have tutorial programs. "I would encourage people to try it," she says. "There's no reason to fear that you can't handle it. You don't have to be a physics major to help teach high school physics, for example. But you have to like a particular subject to teach it well, because the kids usually think they hate it."

You also have to be patient, she says. It will probably be necessary to explain a concept in more than one way because students have different levels of understanding.

"I sometimes respond to questions by asking other questions," Kylene says. "I try to lead the students to finding the answers for themselves. They don't always like that. We don't do their homework for them, but we try to explain the concept behind the problem. I also try to emphasize to students that what they learn can be used in other ways; for instance, something learned in algebra can be useful later in a chemistry class.

"There are certainly more students who need tutoring in math and science," she adds, "and I'm sure there are more Sandians who could do it."

•AStotts (3163)

(Continued from Page Five)

Trading Responsibilities

college students and others, where we are in shock-wave research — and where we've been, both in this country and overseas."

'I Jumped at the Chance'

"So," continues Walt, "when Venky asked me a while back what I'd really like to do — what new directions I might like to take — I jumped at the chance to tell him. I said, 'I've been in management for a long, long time. The day-to-day responsibilities have left me little time, if any, to do any real research. I'd like to get back into that; in fact, what I'd *really* like to do is write a book. Let me tell you about it.' When I explained to Venky what I had in mind, he said, 'Go for it,' and here I am!"

Walt, now Director of Shock Physics Research 1600, has already started to index the available literature about shock-wave research and computer modeling to extend an extensive bibliography that was started when he was a department manager. "Right now," he says, "there's no one place where all these references — covering both early work and all the activities since — are grouped together. Many of them are in conference proceedings, which makes them difficult to track down. So I see the bibliography as a very useful tool."

To enliven the book with some historical insights, Walt is taping interviews with many of the shock-wave-research pioneers he knows. He'll also include foreign shock-wave science. "It's very important that scientists and engineers in this country know what's going on overseas," notes Walt. "Otherwise, we might find ourselves falling behind. Right now, more shock-wave research is being done in other countries — China, France, Russia, and Japan, to name a few — than in the US.

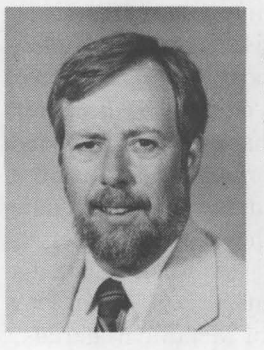
"Back then, shock-wave research was a relatively new field, so you never knew what was around the corner each day."

"Another of my objectives for this book is to ensure that Sandia's outstanding work in shock-wave research over the last 26 years is documented and preserved, not only for current researchers, but for those who will enter the field in the future. We [at Sandia] are justifiably proud of our advances, and this will be another way to let people know about them.

"I feel privileged to have been in on the ground floor in an exciting scientific area, and to have watched the significant advances made over the years," Walt continues. "That's why I'm keen to write this book; the technical work has always turned me on, and I'm eager to share that feeling — and the knowledge I've gained — with others."

•PW

Employee Death



Jace Nunziato, Manager of Fluid and Thermal Sciences Dept. 1510, died May 26 after a long illness.

He was 47 years old.

Jace had been at Sandia since June 1969.

Survivors include his wife and three children.

For Work in CVD Tungsten

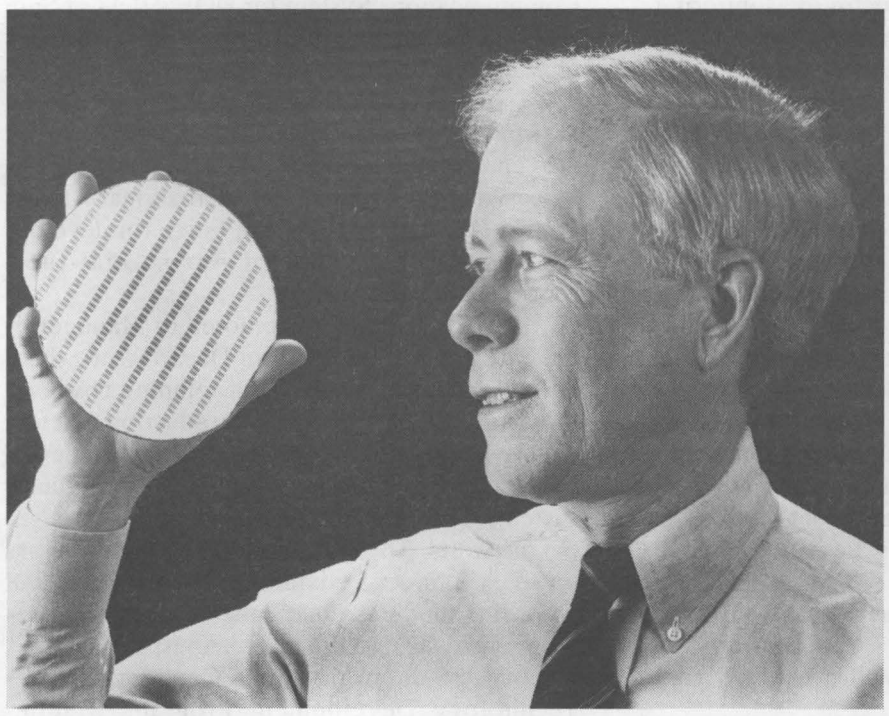
Bob Blewer Wins Federal Lab Consortium Award

Bob Blewer (DMTS, 2132) has received a Federal Laboratory Consortium Award for Excellence, recognizing his role in the development of technology for chemical-vapor-deposited (CVD) tungsten, and in transfer of the technology for use in commercial microelectronics processes and products.

(Two other Sandians, at Livermore, were among the 1990 FLC award winners — see page three.)

"About two-thirds of the member companies of SEMATECH [a consortium for semiconductor R&D] have now adopted CVD tungsten in their baseline processes," says Bob. "CVD metals technology has really moved along since we started work in this area."

"Bob's work several years ago," says Doug Weaver, Manager of Facilities and Process Development Dept. 2130, "was fundamental to establishing an acceptable CVD process for tungsten. He played a key role in moving CVD tungsten from research to manufacturing. Bob demonstrated the technical feasibility of a process for depositing tungsten films up to a micrometer thick — several times thicker than any previously reported — without losing the self-alignment that's a major advantage of CVD tungsten."



BOB BLEWER (DMTS, 2132) looks at a semiconductor wafer of the type used for making integrated circuits, or "chips." After the chips have been formed on the wafer, they are cut apart to be packaged and assembled.

Two Ways to Coat Wafers

Self-alignment is important in an advanced method of CVD tungsten deposition that Bob and colleagues are working on now. In the present commercial method, called blanket deposition, a semiconductor wafer is coated with tungsten, then the unwanted areas of the metal are etched away to form a metal interconnect network. A more advanced, less expensive method is selective deposition. In that method, because tungsten self-aligns — deposits metal only in silicon, silicide, or implant-sensitized designs on the semiconductor surface — the wafer comes out of the deposition chamber already patterned with metallization. That saves several later steps in manufacturing.

Even without exploiting selective deposition, semiconductor manufacturers have good reason to adopt CVD tungsten. As ULSI (Ultra Large Scale Integrated circuit) "chips" pack more and more elements into small areas, the aluminum wires used to interconnect transistors and other components become smaller and smaller — down to 1/200th the thickness of a human hair. In such a thin wire, electron-induced thinning or stress effects can open breaks.

Moreover, at such small dimensions, multiple layers of metallization are necessary to speed the transfer of signals from point to point. Conventional metallization methods were unsuccessful in creating the vertical wiring needed between layers. At present, CVD tungsten is the only proven deposition method that can meet the requirements of multilevel vertical wiring.

Beyond developing the CVD tungsten process, Bob has worked to stimulate the transfer of the technology to the semiconductor manufacturing community. In 1984, he organized and chaired the first conference on Tungsten and Other Refractory Metals for VLSI [Very Large Scale Integrated circuits] Applications. Annual conferences since then have helped stimulate the development of the new tungsten technology. The proceedings of these conferences make up a majority of the work published in this field in the past several years. •CS

What's in the Cards?

Responses to 'Vision Day' Challenge

During his Vision Day talk in April, Jack Walker (6510) urged Sandians to think about their part in fulfilling the goals of the Strategic Plan. "Think about leadership," he said. "Think about yourself. Personalize the plan, and ask, 'What can I do to lead to make this plan happen?' Develop a vision of your own work, your own environment, and what you think the future should look like. Share that vision with your fellow workers."

President Al Narath suggested writing personal commitments on the back of Vision Day handout cards — on which "quality," "empowered employees," and "strategic plan" are the points of a triangle making up "service in the national interest" — and sending them to the LAB NEWS for publication of representative examples.

Here are examples, expressing or implying personal commitments. They appear without names, though many folks did include their names. Some of the longer responses had to be excerpted, and some are slightly edited for readability. A number of cards offered suggestions, rather than the writers' own commitments. We're sending those (minus names) to the appropriate managers.

Thanks to everybody who contributed, and to Barry Schrader (8522) for assembling the cards from Sandia, Livermore.

- My commitment to Sandia is to pursue my activities from the perspective that this is my company, my business: it prospers and grows healthier in direct proportion to that which I put into it.
- I will make an effort to improve my listening skills. I will attempt to separate what's important from what's not important. I will try to improve my communication skills with my team.
- My initial contribution will be to minimize my interruptions of co-workers. I'll do this by writing them notes, gathering several items and scheduling a short meeting to handle the matters, etc. I think that interruptions are the chief impediment to a quality product and the principal source of wasted money. This change will also be more productive for me, because my time will be less fragmented and will permit continuity of thought and production.
- I will achieve quality through processes by defining quality as conformance to all customer requirements — performance, schedule, and cost; focusing on prevention rather than correction; continuously striving toward zero defects.
- I am a new employee, and I have little experience at this level to use as a metric of quality and improvement. Despite this lack of information, or of a system by which to measure, I will know where it counts the most if I have given you my first best effort. A year from now I will be proud. Thanks for the opportunity.
- Quality — I will take time with each project to identify things that could cause me to produce less than a quality product, and will take steps to eliminate those causes.

Empowered Employees — I will identify barriers that prevent me from doing effective work and produce suggestions for eliminating them, including those barriers created by the old culture.

Leadership — I will improve my knowledge of my craft so that the work I do will always be as effective as possible and so that those outside Sandia with whom I interact are aware that the work at Sandia in my field is of the highest caliber.

- Through my commitment to receive a degree, work on an advanced degree, and work in various programs to make more significant contributions to our mission, I will continue to assist the multi-talented Sandia community in accomplishing their tasks — with the highest regard to quality — when given the opportunities to do so.
- To implement the strategic plan, I'll be retiring 31 May 1990! Good luck — I'll pray for all the implementers, and especially for the foot-draggers.
- I don't see a significant difference between what used to be called a "self-motivated employee" and what is now labeled "empowered employee." The point is that having power alone does not improve the process. We all have power, but some choose to simply hold it rather than use it.
- As part of my empowerment strategy, I am going to work harder at overcoming my management's resistance to new ideas and new activities.
- My personal commitment:

Be courageous — be more entrepreneurial by taking on manageable risk through "cutting edge" project teams, such as image processing, for administrative excellence.

Maintain high profile of excellence in the community — serve on boards such as CPA society, arts groups, church groups.

- I will implement a formal process (question-

(Continued on Page Eight)

Sellers and Zaeh Are New Directors

Tom Sellers and Bob Zaeh recently became Sandia directors. Tom is Director of Monitoring Systems 9200, and Bob is Director of Purchasing and Materials Management 3700.

Tom has been involved with systems engineering since he joined Sandia's Field Test organization in 1958. In 1962, he participated in the nuclear test series, Operation Dominic.

In 1965, he was promoted to Supervisor of the Instrumentation Division, where he led development of advanced telemetry, tracking, and instrumentation systems.

From 1968 to 1970, Tom was assigned to the Defense Communication Planning Group in Washington, D.C., with responsibilities for introducing various intrusion detection systems into South Vietnam. He also completed, for the Border Patrol, the initial design of border-monitoring systems reaching from the Pacific Coast to Yuma, Ariz.

Tom returned to Albuquerque in 1970, and supervised development of the Battle Area Surveillance System later installed in South Vietnam. He developed a program for the Security Communications System for DOE's fleet of Safe and Secure Trailers and continued developing physical protection systems for nuclear facilities.

Tom was on the Executive Committee of the Institute of Nuclear Materials Management and was chairman of the Containment and Surveillance Working Group of an International Atomic Energy Agency (IAEA) Task Force for developing concepts to safeguard commercial-fuel-reprocessing facilities.

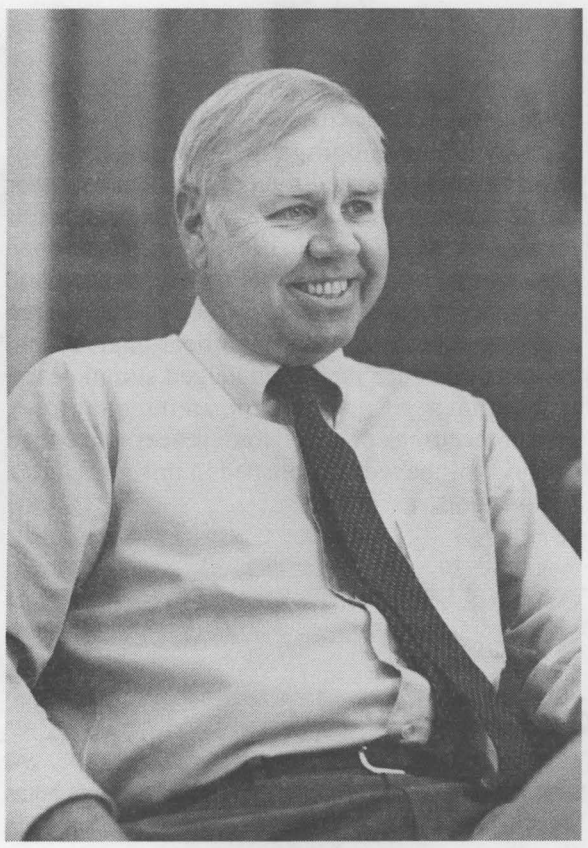
In 1981, Tom was promoted to Manager of the Safeguards Development Department, where he continued leadership for developing physical-protection systems for a DOE production reactor.

He led several international efforts for developing and applying containment and surveillance systems to commercial nuclear facilities throughout the world. The systems included various types of seals, tamper-resistant data-collection and recording modules, unattended surveillance devices, and others for use by IAEA inspectors.

In 1983, he initiated the Command Center Technology Development Program, a reimbursable program that has focused on developing technology and systems to assure control of US nuclear forces in case of a nuclear conflict.

"Bill Myre [ret.] left the Monitoring Systems Directorate in excellent shape, with outstanding people," says Tom. "Arms control is an activity of growing emphasis, and we intend to aggressively pursue the application of Sandia-developed technology to areas of national interest."

Tom has a BS in electrical engineering from the University of Oklahoma. He enjoys running, playing tennis, and gardening. He and his wife Doris have five children.



TOM SELLERS (9200)

Zaeh From AT&T

Bob Zaeh comes to the Labs from AT&T's Columbus Works, where he was Manufacturing Resources Planning Director. This facility manufactures switching, operation systems, and cellular products for AT&T Network Systems. Bob replaces retired 3700 Director Dick Russell.

Bob brings experience in procurement, transportation, and quality-improvement management to Sandia. While Manager of Columbus Works' Purchasing, Materials Management, and Transportation organization, he established several programs to enhance vendor partnership and vendor quality processes.

BOB ZAEH (3700)

He joined AT&T in New Jersey 20 years ago as a purchasing and transportation staff trainee. He has worked in quality management service, purchasing and transportation's national contract organization, equal opportunity, management development and training, and customer service and materials logistics.

While with AT&T's Cable and Wire Division in Baltimore, he managed the Equal Opportunity and Management Development and Training programs. At Columbus, Bob was responsible for customer service, production planning, master scheduling, and materials logistics for more than 100,000 products manufactured at the facility.

"I'm looking forward to enhancing the customer focus and quality-improvement structure within the 3700 Directorate," Bob says. "The Sandia Strategic Plan will provide the framework for me to lead this organization to expand process quality management and improvement (AT&T guidelines program) and empowerment processes."

Bob enjoys tennis and golf. He and his wife Suzi have two daughters. •JW

(Continued from Page Seven)

Responses to Vision Day

naire) to gather input from our former and current customers on satisfaction with services, quality of services, value/cost of services.

• I haven't been here long enough to understand the nature or the urgency of the competitive threats that Sandia faces. But I do know this. Every day, when each of us comes to work, we have many choices to make. We may choose to exercise leadership that day, or we may choose to take it easy and let someone else worry about what is right. We may choose to act empowered that day, or we may choose to let someone else take the risks. We may choose to demand quality results of ourselves and our suppliers that day, or we may choose to produce results that are "good enough for government work." Sandia's future will be determined by the integration of all the individual choices that each of us makes every day.

• Despite current funding limits and manpower allocations, the Archives and Records Management Section of the Technical Library (3141-2) is committed to ensuring that the information Sandians generate is properly managed. At a minimum, we will ensure that (1) our records are created, maintained, and stored in accordance with applicable regulations and requirements; (2) they are protected against loss, destruction or unauthorized use; (3) information is easily and readily retrievable; and (4) no record is disposed of until it is legally appropriate.

We dedicate ourselves to the proper representation of Sandia's quality initiatives through the management of properly controlled, accessible, and retrievable documentation representing the valuable accomplishments of Sandia's empowered employees.

• I plan to promote communication and teamwork through trip reports, news notes, design reviews, etc., and I hope to expand my awareness of activities within Sandia through reciprocal communication. Improved communication and teamwork are the keys to maximizing the effectiveness and efficiency of Sandia National Labs.

• I will work to eliminate cumbersome and inefficient ways of doing business.

• I will have all staff members read the long version of the strategic plan. We will discuss the impressive "What If" section and try to develop a list of "what ifs" for this division; then each member will accept the challenge of trying to bring those "what ifs" to reality.

• I resolve to show courage and challenge my management when they refuse to make the changes necessary for our survival, when they place excessive emphasis on the trivial, when they posture and don't produce. I resolve to speak out against corporate poppycock and "rhetorical change."

• In my years at Sandia, it seems that management skills, especially in the area of communication, play a key role in the "empowering" of Sandia employees. My supervisor has expressed confidence in me by giving me the opportunity to take on new challenges, which have promoted personal growth. In turn, this has contributed to a feeling of enthusiasm and appreciation, on my part, for the work I am performing.

• As part of the Strategic Plan's objective to "improve communication laboratory-wide," the Employee Communications Division will explore and foster new ways to encourage open, honest, and quick communication in all directions. A good idea that isn't shared is a good idea wasted. Let's share them! •

Reaching Over the Fence

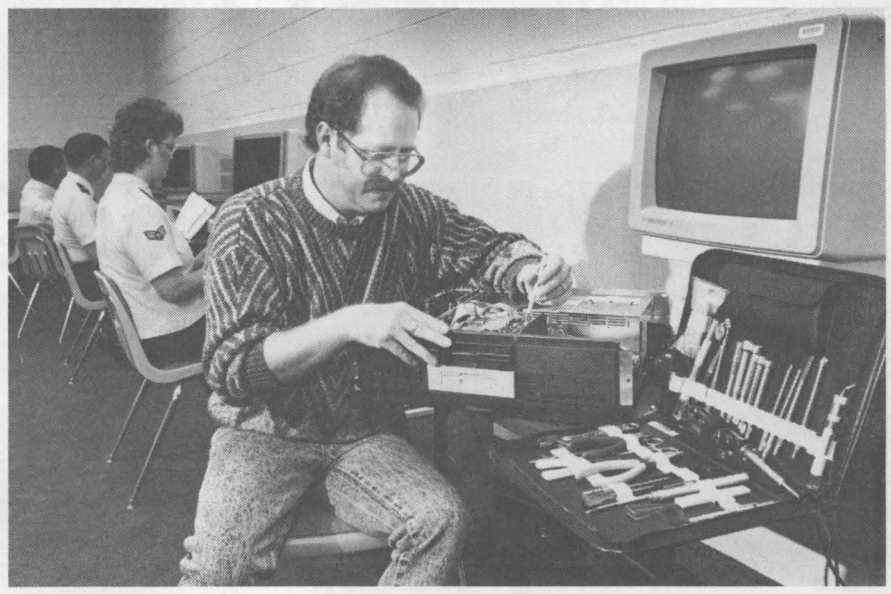
First-Time Equipment Loan to Air Force: 'A Move in the Right Direction'

Sandia's educational outreach efforts take many directions. In this case, it was a matter of reaching over the fence to the Air Force Education Center on Wyoming Blvd.

"Last year, it became apparent that some of the IBM personal computers we were using for PC and secretarial training were no longer adequate for our purposes," says Dick Fairbanks, supervisor of Individual Development Div. 3521. "That didn't mean, however, that the PCs couldn't be put to good use elsewhere.

"In fact, we determined there was a real need for that kind of equipment right in our own backyard. Students — including Sandians — enrolled in the management information systems [MIS] classes at the AF Education Center were having to travel across town to get hands-on computer experience. Webster University and the College of Santa Fe, which conduct MIS instruction at the Center, just didn't have the resources to provide computer equipment at both the KAFB teaching site and their other campuses in Albuquerque."

Dick worked with Jane Shipp, head of the AF Education Center, to effect a first-time-ever educational loan of Sandia training equipment to the Air Force. Technicians John Dillinger (3522) and Jeff Smith (Career Services for the Handicapped contractor assigned to Div. 3521) upgraded the 10 surplus PCs by adding more powerful microprocessors, and Jeff installed the machines at the Education Center in April. "We'll also provide periodic maintenance service on the PCs to ensure their continued high-quality condition," says Dick. He notes that the equipment loan arrangement will be reviewed and likely renewed annually.



JEFF SMITH, Career Services for the Handicapped contractor, worked on upgrading the ten surplus IBM PCs recently loaned to Kirtland AFB's Education Center by Dick Fairbanks' Individual Development Div. 3521. Technician John Dillinger (3522) was responsible for PC-upgrade planning and assisted Jeff with installing more powerful microprocessors in the revamped machines.

Leveraging Resources

"This arrangement," says Jane, "is really a move in the right direction. Let's face it: Members of the Kirtland 'community' — the Air Force, Sandia, DOE, and others — all face the same budget limitations and possibly dwindling resources in the future. Therefore, it makes sense for us to join forces — to figure out how we can best leverage those resources for the greatest benefit to all."

Speaking of leverage, Dick says that loaning the PCs to the AF Education Center — rather than to one of the eight institutions providing instruction there — makes it possible for more than one institution to use the equipment in classes.

Each semester, some 75 Sandians attend on-Base classes conducted by Webster or the College of Santa Fe. "This initiative [the equipment loan] represents more than added convenience for Sandians who attend classes on the Base," says Dick. "It's also an example of Sandia's commitment to become a more active player in the improvement of education in our state and the nation. Consider the cooperation at work here: The Air Force provides and manages the facility, the educational institutions provide the instruction, and Sandia makes the equipment available.

"Of course, the biggest beneficiaries are Base 'residents' — Sandians, DOEans, Air Force personnel — who take classes at the Center. Enhancing the facilities at an educational complex on Base means other advantages, too: less air pollution and greater energy conservation, since people don't have to drive vehicles all over town to attend school."

Dick is exploring other ways to work with the Air Force to enhance educational opportunities on Base. A couple of examples, he says, are the possibilities of sharing instructional TV opportunities and perhaps convincing Albuquerque Technical-Vocational Institute (T-VI) to offer some of its courses on-site to Base employees.

"T-VI President Ted Martinez said in a recent Sandia Community Focus talk that if the Air Force and Sandia continue to increase their combined student base, T-VI might be inclined to offer classes at Kirtland," Dick notes. "In other words, if we can form a large 'common market' of customers on Base — an attractive student base for other educational institutions like T-VI — we should be able to create many more on-site educational opportunities for Base employees.

"The PC loan to the Air Force is a small, but important, start to what Jane Shipp and I hope to accomplish over time," Dick concludes. "She and I would like to demonstrate that military and civilian entities, working together, can provide better educational opportunities for everyone than we could by working independently. A series of small changes like this can equal major changes — and advantages — over the long haul." •PW

For Your Benefit

Taking a Bite Out of Dental Costs: Preferred Dental Program

Sandia's Preferred Dental Program (PDP) saved Sandians and the Labs more than $120,000 in its first year, according to Benefits Dept. 3540. A group of board-certified dentists in the Albuquerque and Livermore areas enrolled in PDP have agreed to provide dental services for a contracted, predetermined fee. PDP was implemented in November 1988 for the Sandia Dental Expense Plan.

If your dentist is enrolled in PDP, you may have experienced lower out-of-pocket expenses because he or she has agreed to a set fee that's often lower than the usual fees charged by non-PDP dentists. Performance results for PDP's first year (November 1988-December 1989) were recently received from the program administrator, Metropolitan Life Insurance Company. Some of the findings:

- Approximately 10 percent of all dental services provided during this period were provided by PDP dentists;
- Use of the PDP resulted in a total savings of $120,721, of which $109,910 was saved by employees using PDP dentists. Sandia saved the remaining $10,811 as a result of lower reimbursement rates for Type A (preventive and diagnostic) expenses; and
- Employees used PDP dentists primarily for Type B (restorative) procedures such as fillings and crowns.

To encourage greater use of the PDP, Sandia's Benefits organization plans several improvements during the coming year. For instance, Metropolitan and Sandia will recruit more dentists into the PDP, with emphasis on specialists such as orthodontists, periodontists, and oral surgeons.

Brown-Bag Information Session

Also, more information on PDP — changes in participating dentists, how to realize savings through the program, and so on — will be made available. A lunchtime PDP session in the Benefits Brown Bag Series is planned at Sandia, Albuquerque and will be announced to all employees.

A PC-based dental-shopper system called the Dental Fee Inquiry System will be introduced on a trial basis. The system will make it possible for employees to compare their personal dentist's fees with a PDP dentist or any other dentist in the area.

More frequent use of the network — and a greater demand for network dentists — will make this preferred-provider program even more successful and save employees and the Labs even more money, says Louise Louden (3545). If you have ideas or comments about how to improve the PDP network, call Louise on 4-3882. She can also provide dentists' referral cards to those who believe their personal dentists would be interested in joining the PDP.

If you don't have a current list of participating PDP dentists, call Benefits on 4-3545 to obtain a copy. •

Welcome

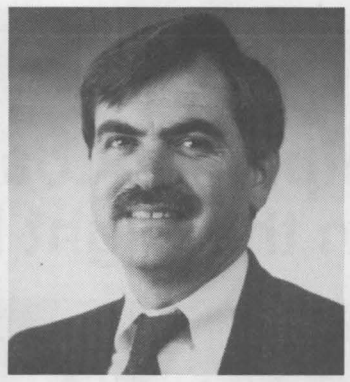
Albuquerque — John Beitia (3745), Margaret Casbourne (122), Bradley Hance (1813), Richard McLendon (122), Cindy Morrison (2852), Stanley Orrell (6343), Kyu Paek (7254), David Peercy (7254), Laurie Plank (21-1), Lorena Sisneros (21-1), Paul Weber (5222), Don Wichhart (122); Other *New Mexico* — Carla Mewhinney (6343).

Elsewhere: *Colorado* — Juan Torres (5175); *Mississippi* — Anna Martensen (2346); *Pennsylvania* — Narayan Doddapaneni (2523); *Texas* — Paul Beauchamp (7264), Lawrence Irwin (9212).

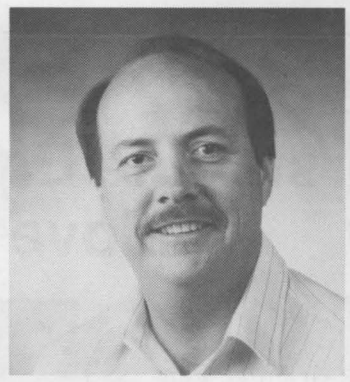
MILEPOSTS

LAB NEWS

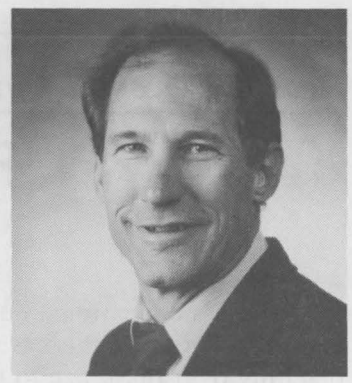
June 1990



John McAuliffe
(3562) 20

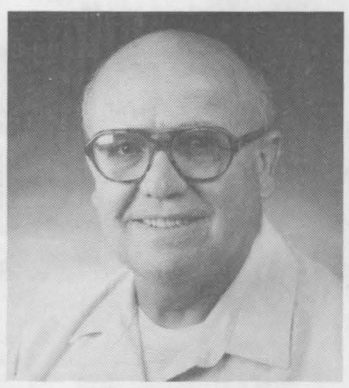


Steven Pink
(5147) 15

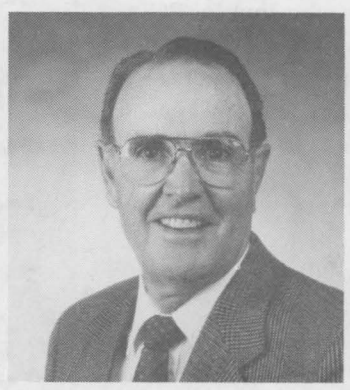


Robert Stearley
(9143) 25

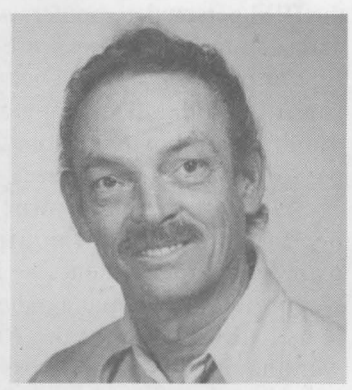
Delores Molina
(152) 30



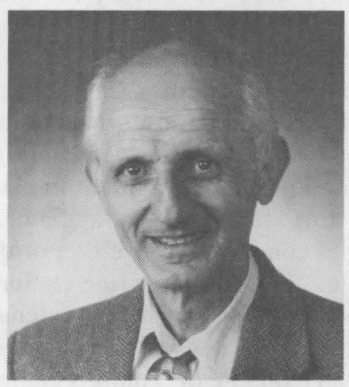
Jesse Allen
(5234) 30



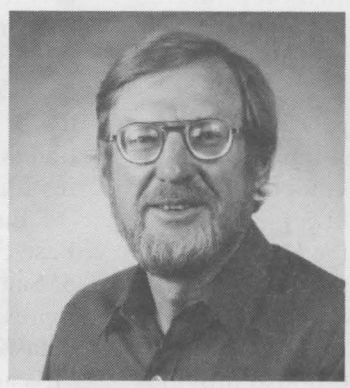
Ward Hunnicutt
(7800) 40



Jim Pennington
(3153) 35



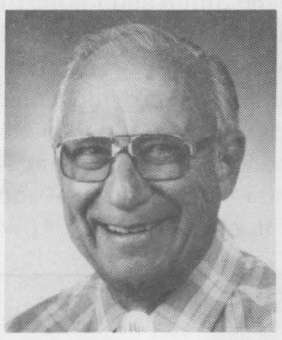
Al Hachigian
(DMTS, 7213) 30



William Riggan
(2533) 35

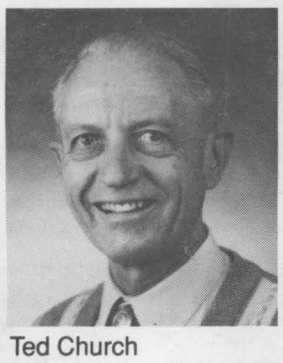
Claudia Johnson
(2852) 15

Recent Retirees



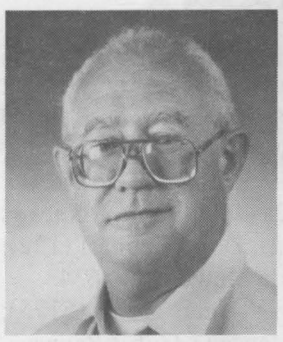
John Lewin
(1512) 23

Edwin Wittwer
(9213) 37

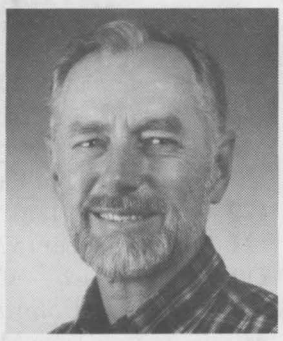


Ted Church
(7290) 43

Bertie Huston
(7243) 33



David McCarthy
(2526) 30



Dick Kavet
(5213) 35

Take Note

The Bernalillo County Commission recently appointed John Snowdon (7852) and Neal Branson (ret.) to the UNM/Bernalillo County Mental Health Center Board of Trustees. Both John and Neal are members of the Alliance for the Mentally Ill. John started actions that triggered revision of the New Mexico mental-health code that provides for court-ordered treatment. The primary responsibility of the board of trustees is to oversee financial matters of the UNM/Bernalillo County Mental Health Center.

Retirement Seminar

Guy Trujillo, SunAmerica Securities, Inc., will present "What You Should Know About Retiring Before You Retire" on Wednesday, June 6, at the Coronado Club, Conquistador Rm., at 5 p.m. Included are discussions about estate planning and IRA rollovers. RSVP to Guy on 294-6655.

The June 14 meeting of the New Mexico Chapter of the National Society for Performance and Instruction (NSPI) will feature Prof. Milt Garrett, head of UNM's Dept. of Management Development, who will moderate a panel discussion on the pros and cons of strategic planning for business. Included in the program is a video by business consultant Tom Peters, "A World Turned Upside Down." Meeting activities begin at 6 p.m. at the London Limited Restaurant (Royal Motor Lodge, Central and Sierra NE). Cost is $3. Contact Charline Seyfer (3522) on 5-8990 for information.

* * *

Sandia, UNM, New Mexico Water Resources Research Institute, City of Albuquerque, and New Mexico Institute of Mining and Technology are sponsoring a conference, "The Rio Grande Basin: Global Climate Change Scenarios," on Saturday, June 2, from 8 a.m. to noon at the Ramada Classic Hotel. Sen. Pete Domenici will deliver the opening address. Conference topics include climate change, research opportunities, national and regional impacts, and impacts on ecological systems. Registration is $7.50. For information, contact Mike Edenburn on 5-8297.

* * *

Retiring and not shown in LAB NEWS photos: D. R. Deatherage (2312), Louis Wigley (3154), Gardner Green (3426), Eldon Upchurch (5213), Henry Harada, Jr. (5261), Carl Hullinger (7815), Helen Davison (9100), and Robert Rutter (9325).

Fun & Games

Golf — The first Sandia Women's Golf Association 9-hole tournament was played May 12 at the Puerto Del Sol Golf Course. The event was coordinated by Nina Coe (3718) and Karen Varga. Twenty-eight SWGA members participated. Prizes were awarded to: First Low Gross — Flight A, Ginny Moore (2800); Flight B, Deb Reichman; and Flight C, Teri Carpenter (3731); Second Low Gross — Flight A, Regine Morris; Flight B, Tammy Beeler; and Flight C, Betty Worley (ret.); First Low Net — Flight A, Minnie Shurick; Flight B, Carmen Allen (2615); and Flight C, Shirley Lopez (3745); Second Low Net — Flight A, Marijo Hinrichs (6000); Flight B, Gretchen Gardner (154); and Flight C, Lupe Massoth (2632); First Low Putts, Shelly Barnes; Second Low Putts, Jean Rogers (ret.); Longest Drive, Shirley Lopez; and Closest to the Pin, Ruth Wright (ret.). The next 9-hole tournament is scheduled June 9 at the Arroyo Del Oso Golf Course. For information, contact Karen Varga on 293-9432.

Optoelectronics Symposium Focuses on Concepts and Applications

Although the name seems to keep changing, the technology remains important: "Optoelectronics '90" will draw about 125 non-Sandians to the Tech Transfer Center next week to discuss optoelectronics for conventional and nuclear weapons. At last count, some 200 Sandians had registered.

Two previous symposia — which used "electro-optics" and "photonics" as key terms — were for Sandians only. This one is open to people from DOE labs, DoD agencies, integrated contractors, AT&T, and other selected institutions. The presentations will be unclassified.

"The current word for the technology, 'optoelectronics,' can mean different things to different people," says symposium chairman Mert Robertson (2531), "but it always involves the use of light. Optoelectronics is a leading-edge technology in weapon R&D. Depending on the application, it can give more cost-effective performance than conventional electronics, or new capabilities, or both."

As an example, Mert mentions fiber optics: a signal carried through an optical fiber by light is less susceptible to electromagnetic interference — such as lightning or human-produced jamming — than an electrical current carried in a wire.

About 60 invited and contributed papers are organized into sessions titled Optoelectronic Concepts and Development, Optical Ignition, Direct Optical Initiation of Explosives, Optoelectronics Component Development and Manufacturing, and Optoelectronics in Weapon Testing. Sandians not yet registered but interested in attending some of the sessions, which run June 5–7, will probably find space in the TTC — but seating priority goes to those who have pre-registered. (More information is available from Mert — call 4-2472, or stop by Bldg. 891, Rm. 3423.)

The printed program for Optoelectronics '90 recognizes the work of the late Roger Chaffin, who was manager of the Device Research Department at the time of his death in 1986. "Roger was terminally ill at the time of the 1985 symposium," says Mert, "but he was an important contributor both to that symposium and to Sandia's optoelectronic-device R&D. The optoelectronics community misses him."

UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Div. 3162.

Ad Rules

1. Limit 20 words, including last name and home phone.
2. Include organization and full name with each ad submission.
3. Submit each ad in writing. No phone-ins.
4. Use 8½ by 11-inch paper.
5. Use separate sheet for each ad category.
6. Type or print ads legibly; use only accepted abbreviations.
7. One ad per category per issue.
8. No more than two insertions of same "for sale" or "wanted" item.
9. No "For Rent" ads except for employees on temporary assignment.
10. No commercial ads.
11. For active and retired Sandians and DOE employees.
12. Housing listed for sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

ANTIQUES: Philco console radio, model 118; rocker, circa 1915. Johnson, 255-5427.

CUSTOM CAMERA, Mamiya RB-67, in Halliburton case, w/custom lenses, filters, meters, $2150 OBO. Goodson, 298-7836.

DINING ROOM SET, natural-pine butcher-block hexagonal table, w/6 oak chairs, 2-piece china cabinet. Lloyd, 822-8567.

EXECUTIVE DESK, metal, woodgrain formica top, $50; square end table, w/storage space, $25; 2 twin-size mattresses, $20/ea. Benedict, 883-2785.

CARVER AMAZING LOUD SPEAKERS, cost $1500, sell for $800. Babcock, 892-7199 after 5.

SHOTGUN, Springfield model 67H, 12-gauge, 3" pump, unfired, $100. Patrick, 293-4796.

OSCILLOSCOPE, Heathkit model IO-14, $50. Caskey, 296-1696.

ETHAN ALLEN PEDESTAL TABLE, dark pine, glass top, w/6 chairs, dry sink, $700 OBO. Choate, 255-1204.

BAND SAW, Carolina model HD-10, metal cutting, extra blades, list price $4980, sell for $2149. Luther, 293-4462.

DULCIMER, 4-string, 40", 2 books, instructional cassette, $125. Coalson, 298-0061.

SHOTGUN, 20-gauge, 3-shell clip, bolt-action, leather carrying case, cleaning kit, $125 OBO. Case, 293-5466.

TABLE, 49" L x 27" H x 27" D, light-oak formica-type finish, $100. Kaye, 292-4242.

DRESSER, infant-style, w/4 drawers & closet, off-white color, $50. Ludwigsen, 821-9624.

POP-UP CAMPER, '86 Jayco 806DL, w/furnace, 2-way refrigerator, awning, $3000; complete TS-830S station, $800; Contax 139-Q, w/accessories, $400. Furry, 281-2548.

TRAVEL TRAILER, '77 Comet, 21', self-contained, LP & electric refrigerator, range w/oven, refrigerated AC, $3950. Garcia, 864-7640.

MOVING BOXES: 23 book, 5 mirror, 3 wardrobe, large and medium mattress, 9 dishpack, $50/all OBO. Ricker, 821-5597.

QUEEN-SIZE BED, w/mattress, box spring, $50; twin-size bed, w/mattress, box spring, solid-wood headboard, $50. Higgin, 298-5661.

TV AERIAL, new, $20; 1-yr.-old sheet-metal covers for swamp-cooler air conditioner, $20; approx. 1/2 cord wood, $40. Purcell, 296-4986.

SCOPE CALIBRATOR, Heathkit model IG-4244, $100. Cantrell, 891-0920.

DINING TABLE, Ethan Allen maple, w/6 chairs, $285 OBO. Blottner, 292-6058.

ENCYCLOPAEDIA BRITANNICA, includes micro, macro, junior, children's and yearbooks through 1988, never used, $500 OBO. Prusak, 296-1571.

GUITARS: '87 Ovation, electric/acoustic, $325; Suzuki inlaid 12-string, $125; Goya Vintage 12-string, $60; each w/original case. Dybwad, 296-9047.

FOUR '86 NISSAN RIMS, w/lug nuts, caps, 15x6, $50; Nissan stereo, w/2 speakers, $20. Smith, 888-7928.

FRIGIDAIRE REFRIGERATOR, 17 cu. ft., top freezer, frost-proof, reversible doors, harvest gold, $175. Whitley, 865-4390.

AIRLINE TICKET, Southwest Airlines, to Lubbock, Tex., on June 14, 10 a.m., $19. Salgado, 291-9460.

GERMAN SHEPHERD PUPPIES, AKC-registered, championship bloodlines, 2 males, w/shots and papers, $250/ea. Roth, 865-0524.

LAWN MOWER, Lawn Boy, self-propelled, gas-powered, $150. Ostensen, 296-4227.

FLY/SPINNING ROD COMBO, bamboo, $25. Shapnek, 281-5913.

EPIQUALE PIGSKIN SOFA AND CHAIR, w/pillows in Southwest colors, new, $360.Treml, 292-9219.

XT-TURBO-COMPATIBLE COMPUTER, 640K RAM, 20MB hard drive, 360K floppy, monochrome monitor, printer, software, manuals, $700. Smith, 293-8928.

AM/FM CASSETTE CAR STEREO, Dolby, Ford stock, auto-reverse, fade, balance, bass, treble, 18 presets, $150 negotiable. Duran, 831-0231.

AIR CONDITIONER, $60. Cibicki, 877-7098.

LIGHT FIXTURE, close-to-ceiling, 7 bulbs, wood, amber glass, and brass, hexagon shape, 20" across, $39 OBO. Fjelseth, 296-2257.

COFFEE TABLE, 2 end tables, tubular chrome w/smoked glass tops, $50/all 3. Kolb, 281-1570.

COUCH AND LOVE SEAT, camel, $500; washer/dryer, Kenmore, apt.-size, electric, $150. Marks, 275-3274.

REFRIGERATOR/FREEZER, Sears Coldspot, 19.3 cu. ft., auto-icemaker, frost-free, white, $325. Lewis, 883-8454.

RCA COLOR TV, 19", AM/FM built in, $125; Sears Kenmore 19" TV, $80; Sears evaporative cooler, 1/2-hp 2-spd motor, new, $50. Sanchez, 831-2645.

MAN'S WET SUIT, medium, $70; DP rowing machine, $40. Pregent, 281-1414.

AIRLINE VOUCHER, anywhere America West flies, to be used toward one airline trip, expires 1/91, $400 value, sell for $300. Sanchez, 839-4970.

DASH MAT, new, maroon, fits '84-'89 Nissan 300ZX, best offer. Davis, 294-1048.

'80 TOYOTA 20R MOTOR, in pieces, lacks oil pickup sump and oil pan, $100. McKenney, 268-7390 leave message.

BLACK LAB, female, 1 yr. old, spayed, has shots, housebroken, needs kids and big yard, $30. Hollister, 296-8055.

CAB-OVER CAMPER, 10', 3-burner stove w/oven, gas refrigerator, gas and electric lights, toilet, $600 OBO. Tingley, 294-5448.

HUMIDIFIER, console, portable, 8.5-gal., automatic, $75; bathroom exhaust fans, new, $10/ea. OBO. Moss, 298-2643.

WOOD/WICKER CHAIR, wicker shelf, TI printing calculator, Southwestern coffee and end tables, utility shelf, desk chairs. Levan, 293-0079.

AT&T 6300 COMPUTER, 2 floppies, 20MB external hard disk, Epson extra-wide printer, manuals, $1200 OBO; dinette, oak formica table, w/leaf, 4 chairs, $100. Pruett, 268-2946 before 9.

COUCH AND LOVE SEAT, earth tones, $225. Martinez, 296-9035.

GOLF CLUBS: woods, irons, and bag, $75. Shope, 293-7697.

SAILBOARDS: Alpha 165F epoxy, high-performance, 5.5 & 6.5 RAF sails, complete, $695 OBO; Ocean Pacific, complete, $125. Davis, 296-6022.

MOVING SALE: furniture, kitchen items, dishes, craft supplies, Home Decor items, June 8-9, 8:30 a.m.-6:30 p.m., 296 Palmer Park (Towne Park, Eubank & Chico). Smith, 299-4842

COFFEE TABLE, 5' x 2', w/2 end tables, Mediterranean, surfaces needs some refinishing, $95. Crow, 821-0956.

SEARS SWING SET, w/slide, 2 swings, slider, and seat swing, $75. Claussen, 293-9794.

KITTEN, male, yellow, tiger-striped, short hair, born April 3, free to good home. Owen, 299-3487.

TRANSPORTATION

BICYCLES: woman's 3-spd., $30; man's 10-spd., $50. Haid, 292-0159.

'78 BUICK SKYLARK, loaded. Cooper, 299-6936.

MOUNTAIN BIKE, w/extras, $125. Freeman, 296-2977.

'73 CONTINENTAL MARK IV, 2-dr., lime gold, white interior, 15K miles on completely rebuilt 460 engine, original owner, $3500 OBO. Ater, 839-4473.

'86 CHEV. PICKUP, loaded, 4-WD, $10,000. Lackey, 869-9333.

CANNONDALE BICYCLES, aluminum frames: 9R600, $400; 9R300, $300; Cannondale trailer, hooks to bike, carries 2 children. Patrick, 293-4796.

'86 HOBIE CAT, 17', Frantech sail, magnum wings, EZ-Load trailer, sail tube, single-handed sailing, $2200 OBO. Gonzalez, 296-3814.

STARCRAFT BOAT, 18-1/2', deep-V, 140-hp IO motor, closed cooling, trailer, $9000 OBO; IH 4-WD pickup/camper, AC, PS, PB, $6000. Dillon, 877-7628.

'88 BRONCO II, 4-WD, V-6, Eddie Bauer package, 24K miles, $12,400. Miller, 822-8733.

'69 FORD MUSTANG FASTBACK, AC, AT, PB, PS, 302, $3700 OBO. Higgin, 296-6211.

'67 LINCOLN CONTINENTAL, 4-dr., suicide doors, $1800 OBO. Zownir, 256-3717.

'84 FORD BRONCO II, 4-WD, AC, rebuilt AT, stereo, $5500. Lambert, 293-8825.

'82 BMW 733i, 75K miles, silver, blue-leather interior, w/sheepskins, price negotiable. Coningham, 293-9563 after 4.

'86 FORD F150XL, 4x4, SWB w/Brahma shell, 5.0L 302, EFI, 62K miles, $8500. Edwards, 869-2157.

VESPA GRANDE MOPED, 2-seater, 100-mpg, 1.4K miles, $350; helmet, $15. Spraggins, 266-6403 after 4:30.

'86 TOYOTA CAMRY DX, white, AC, cruise, AM/FM radio, 5-spd. Goldsmith, 260-1600.

'87 CHRYSLER LeBARON COUPE, 4-cyl., AT, PS, PB, PW, PL, 8K miles on dealer-rebuilt engine, $7695, take over payments/refinance. Andrews, 299-1319.

'89 ISUZU PICKUP, blue, 5-spd., 819 miles, AM/FM stereo, standard package, still under warranty, $7900. Chavez, 899-8695.

'80 FIREBIRD, V-6, T-tops, AC, AM/FM, $2600. Alderson, 293-5112.

'83 MAZDA RX-7, gold, sunroof, $4300. Marks, 275-3274.

'72 CHEV. 1/2-TON PICKUP, long bed, 350 engine, new radio. Hardin, 828-1502.

'70 CADILLAC SEDAN DeVILLE, 4-dr., air shocks, hitch, beige metallic, black-vinyl top, $4600. Gibbs, 298-2108.

'81 VW RABBIT, diesel, 4-dr., 5-spd., AC, 79K miles, $800. Ray, 294-7720.

'85 MUSTANG LX, 4-cyl., AT, loaded, $4275 firm. Smith, 292-6425.

'84 TOYOTA CELICA GT, 45K miles, AC, cruise, new tires and battery, stick, 4 speakers, $5500. Wood, 294-5575 after 6.

'88 COUGAR LS, fully equipped, silver and gray finish, 11K miles, below book. Chapman, 292-1198.

'80 PLYMOUTH ARROW, hatchback, 5-spd., 78K miles, $895. Swahlan, 292-3598.

'88 HONDA SHADOW, 1100cc, black, 5.5K miles. Gutierrez, 275-9345.

'87 BUICK LeSABRE LIMITED, 4-dr. sedan, all power, 55K miles, $8750. Kern, 899-0679.

'58 EDSEL BERMUDA SW, complete car, original engine, options, needs paint & trim reassembly, $1600 OBO. Davis, 296-6022.

REPOS: '88 Mustang, 8-cyl., black, 5-spd.; '82 Pontiac Trans Am, 8-cyl., AT, 51.3Kmiles, bids accepted through June 13, we reserve the right to refuse all bids, subject to prior sale. Sandia Lab FCU, 293-0500.

FUJI 12-SPD. BIKE, $150. Shope, 293-7697.

'83 PORSCHE 911SC COUPE, all options, adult-driven, locally owned, new paint and tires. Ahr, 294-8736.

REAL ESTATE

3-BDR. HOME, 1888 sq. ft., 2 baths, open great room, solar, atrium, landscaping, assumable no-qualifying, Juan Tabo/Menaul, $112,900. Scott, 294-8627.

5-BDR. TRI-LEVEL HOME, 2700 sq. ft., Chelwood/Constitution area, 3 baths, den, new roof, siding, carpet, $130,000. Kendall, 298-2196.

3-BDR. HOME, Bernalillo, pool, enclosed Jacuzzi, 1-3/4 baths, wet bar, den, double garage, sunken yard. Guttke, 831-6831.

2-BDR. TOWNHOME, 2 baths, Tramway and Candelaria area. Lizut, 275-0965.

2-BDR. HOME, 1-3/4 baths, 1206 sq. ft., near Juan Tabo/Lomas, remodeled, FP, covered patio, $68,000. Sanderlin, 298-7147 after June 10.

PENDARES VILLAGE LOT, near Las Vegas, N.M., .52 acre, near golf course and fishing pond. Worden, 881-4486.

3 ACRES VACANT LAND, irrigable, Bernalillo. Meyer, 836-0920.

2-BDR. MOBILE HOME, Windsor, 14' x 70', 1 bath w/2 sinks, all appliances, Four Hills Park. Boston, 298-9727 or 291-8810.

4-BDR. HOME, 1-3/4 baths, 1900 sq. ft., La Cueva district. Adams, 821-9079.

WANTED

REPAIR OR SHOP MANUAL for OMC outdrive, late '70s. Yingst, 884-3812.

HOME NEEDED for black Lab/Irish setter (or Lab/golden retriever), female puppy, approx. 5 mos. old, abandoned in Cedar Crest. Douglas, 281-9843.

NATIONAL GEOGRAPHIC MAGAZINES, free. Fjelseth, 891-2494.

BOOKS: *Strong's Concordance*, interlinear Greek/English New Testament w/Textus Receptus or similar Greek text; *Vine's Expository Dictionary*, New Testament words. Levan, 293-0079.

IRIS CORMS, any color, low cost. Jones, 883-1284.

CHRISTMAS-TREE LIGHT STRINGS, w/C9-1/4-size sockets, for large candelabra bulbs. Harris, 344-6640.

WORK WANTED

COLLEGE SENIOR looking for work as nanny; will drive, tutor, and entertain children, references. Hunter, 293-8707.

LOST AND FOUND

FOUND: 4 keys, 1 broken, and key-ring knife, found at corner of Wyoming and "G" St. Stringfellow, 4-7160.

SHARE-A-RIDE

FULL-TIME VANPOOL SEATS AVAILABLE, along N-14, Frost Rd., Tijeras, ride every day. Yelton, (281-2893) or Burns (281-3922).

Coronado Club Activities

Choice Chow + Sagebrush Shuffling = Extraordinary Evening

TONIGHT, FOR YOUR STOMPIN' PLEASURE — the Isleta Poor Boys return to belt out the c/w music from 8 p.m. to midnight. Beforehand, enjoy some pretty elegant trail fare: prime rib ($7.95), lobster tail ($13.95), filet mignon ($8.95), or poached salmon ($6.95). Wearing a ten-gallon or some other kind of cowboy hat gets you a free drink with dinner. Help out the ranch hands in the kitchen with a reservation call (265-6791).

THE T-BIRD SHUFFLERS (aka card sharks) go back to the tables on June 14, starting at 10 a.m. Jim McCutcheon doesn't have a Flag Day costume, but urges you to join the fun just the same.

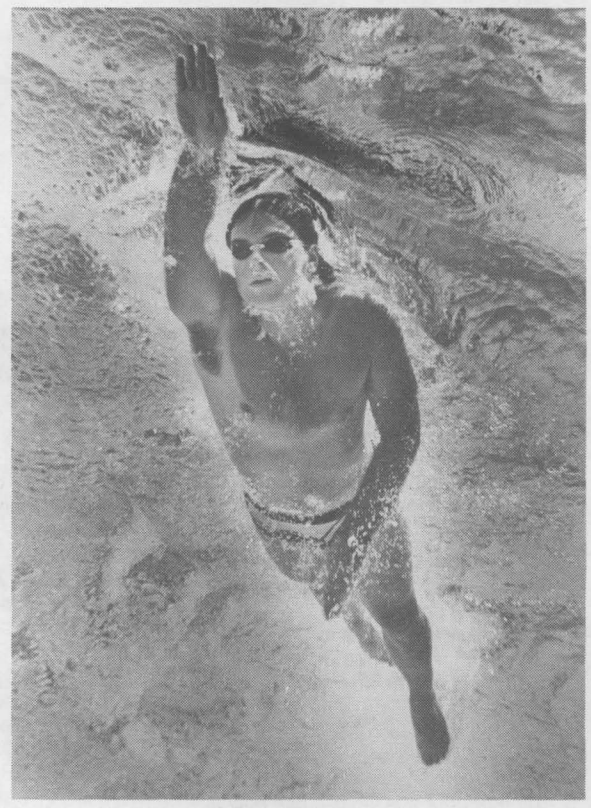
IF YOU'VE GOT THE GLITZ-GULCH BLUES because you don't have a trip to Vegas planned in the near future, take heart: Casino Night's coming up in two weeks (June 15), so mark your calendar. Details next issue.

SUNDAY BRUNCHES IN JUNE will again be served up at discount prices: $5.95/adults and $2.50/children under 12. Make your reservation early for brunch on June 10 or June 24 (or both); all that fine food is served from 10 a.m. to 2 p.m. both days.

SPLASH-AND-DASH is a favorite maneuver of Albuquerque balloonists. There's a new version at the Club this summer: splash-and-lunch — a great way to celebrate at birthday parties or other special get-togethers. Splash-and-lunch coupons ($3.95 each) entitle the holders to pool admission, one regular hot dog or corn dog, a small bag of french fries, and a small fountain drink. Coupons, which can be used any day (including weekends) can be purchased — by Club members only — at the pool office during regular pool hours.

JAZZOPHILES, REJOICE! The Red Hot Peppers make a return appearance June 8 from 8 p.m. to midnight, right after the Friday-night dinner. Entree selections that night are prime rib or fried shrimp (both $7.95).

GET IN THE SWIM every Wednesday night in June at Family Swim Nights. The pool is open until 8 p.m., and there's a low-cost buffet available to feed your hungry tribe. Entertainment includes special activities for kids during the evening. Also available: both non-alcoholic and alcoholic drinks from the patio bar. Regular admission rates: free/pool pass holders, $3/Club members and guests.



TRYING OUT THE NEW C-CLUB POOL a week or two before the Memorial Day grand-opening celebration was pool manager Al Sheldahl (son of Bob, 1553). Intrepid LAB NEWS photographer Randy Montoya shot this photo from pool bottom — deep end, naturally!

Events Calendar

Events Calendar items are gathered from various sources. Readers should confirm times and dates of interest whenever possible.

June 1 — Nora Reynolds Dance, performance of five works by choreographer Nora Reynolds; 8 p.m., KiMo Theatre, 877-7153.

June 1-2 — Festival Showcase of the Arts: War Zone Street Players, children's theater group, 7:30-8 p.m. Fri.; Ballet Folklorico De Nuevo Mexico, 8-8:40 p.m. Fri.; Red Hot Peppers, 1-1:55 p.m. Sat.; Jose Salazar (classical guitar) and Bill Evans Dance Company, 3-3:20 p.m. Sat.; South Broadway Cultural Center, free, 848-1320.

June 1-3 — "Rough Crossing," Tom Stoppard comedy based on Ferenc Molnar's "Play at the Castle," includes songs written by André Previn; 8 p.m. Fri.-Sat., 6 p.m. Sun.; Vortex Theatre, 247-8600.

June 1-16 — Albuquerque Playwrights Showcase: Theatre-in-the-Making presents new works by local writers, "Seven Times Over" by Paul Plunkett explores history of love and war, and "Sunrise" by Karin Williams looks at troubled relationship of a vampire and his girlfriend; 8 p.m. Fri.-Sat., CenterStage (3211 Central NE), 260-0331.

June 1-17 — Exhibit: "Twelve Artists From the German Democratic Republic," traveling exhibit of art from East Germany; 9 a.m.-5 p.m. Tues.-Sun., East Gallery, Albuquerque Museum, 242-4600.

June 1-Aug. 5 — Exhibit: "From the Land of Dragons," collection of rare fossils, mostly from China; 9 a.m.-5 p.m. daily, New Mexico Museum of Natural History, 841-8837.

June 4 — Monday Morning Lecture Series: "Mogollon Findings, Cachio Negro Creek Area," by Richard Chapman, Assistant Director of UNM Contract Archeology Office; 10 a.m., Indian Pueblo Cultural Center, 247-4907.

June 12 — "Peter and the Asphalt Crack," play based on teenage and adult concerns about substance abuse and related problems; 9:30-11:30 a.m., South Broadway Cultural Center, free, 848-1320.

June 14 — Loren Kahn Puppetry, 10 a.m., South Broadway Cultural Center, free, 848-1320.

Congratulations

To Karol and Francis (6315) Nimick, a daughter, Aileen Margaret, April 11.

To Yolanda Aragon (5154) and John Aragon (7515), a son, John Jason, April 23.

To Barbara (22-2) and Joe (3425) Macias, a son, Thomas, April 25.

To Dawn McMillen (1201) and Fred Schkade (2615), married in Albuquerque, May 5.

To Lydia and Charles (7818) Dalton, a daughter, Dana Mae, May 8.

To Carol (1841) and Doug (1513) Adkins, a daughter, Emily Renee, May 10.

To Michelle McKinney (3550) and Allen Sault (6211), married in Albuquerque, May 12.

To Laurae and Kenneth (1111) Minor, a son, Forrest Dayton, May 13.

LOOKING OVER the agenda for an upcoming meeting are officers of the South Central New Mexico Technicians Affiliate Association: (from left) Zane Lawson, treasurer (6344); Tracy Dunham, alternate treasurer (1824); Pat Neiswander, secretary (5133); Tony Stephens, Inhalation Toxicology Research Institute representative; and Michael Gonzales, chairman (6212). SCNMTAA, affiliated with the American Chemical Society and now beginning its third year, provides members an arena for community service and for developing their own sense of professionalism. Prospective members — especially in chemistry and materials science (but others are welcome) — should contact Michael on 6-4868.